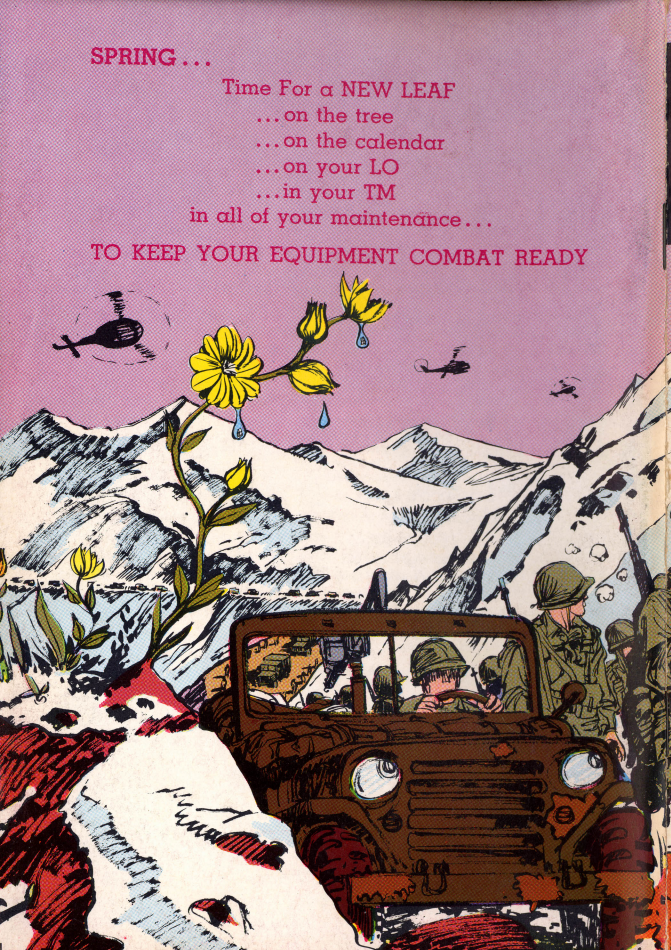
Issue 148
PS
1965 Series
THE PREVENTIVE
SPRING
CHANGE
OVER
(SEE PAGE 29)
DRAIN & CHANGE OIL
DRAIN ANTI-FREEZE
Will Eisner

SPRING . . .

Time For a NEW LEAF
. . . on the tree
. . . on the calendar
. . . on your LO
. . . in your TM
in all of your maintenance . . .

TO KEEP YOUR EQUIPMENT COMBAT READY



Issue 148

P.S

1965 Series

THE PREVENTIVE MAINT

TRAIN FOR MAINT

When it comes to maintenance, training gets mighty important.

If you've got anything to do with using or maintaining Army equipment (and who doesn't?), you've had maintenance training from the start. Like, when you were issued your first equipment . . . rifle, pack, cartridge belt and shelter half. The sergeant gave you the low-down on how to keep them in top shape.

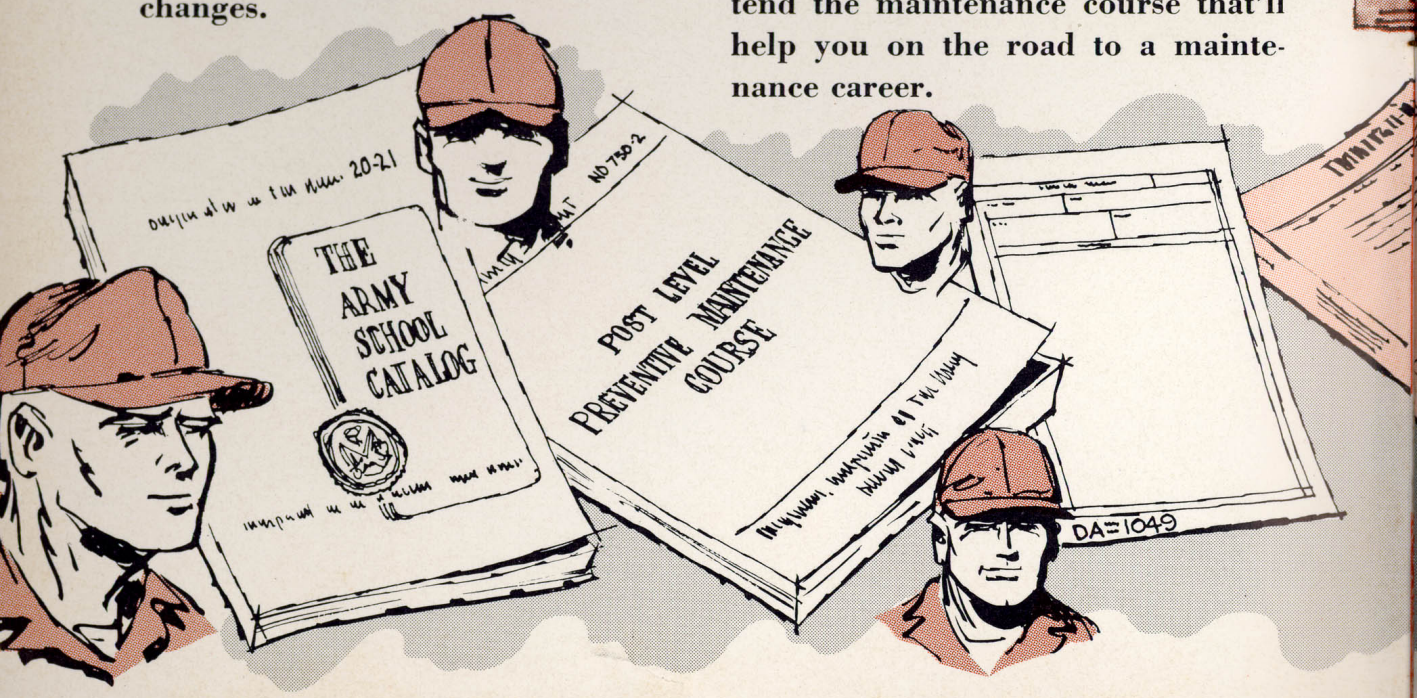
With the Army's equipment getting more complicated, maintenance gets more important for fighting outfits to keep combat-ready.

If you want to get on top of your equipment maintenance and maybe make a career of maintenance (lots of guys do), the book you want to give the eagle-eye is DA Pamphlet 20-21, "The Army School Catalog," dated August 1962, with dozens of changes.

It lists Army school courses . . . many of them in maintenance. Wheeled and tracked vehicles, radios, radar, missiles, artillery, engineer equipment, aircraft . . .you name it. And what's more, there are courses for officers as well as enlisted men.

There's a special preventive maintenance course at Fort Knox for field grade officers within CONUS. Some overseas commands, like USAEUR, have their own PM courses. Also, many divisions and posts have set up PM courses based on DA Pamphlet 750-2, "Post Level Preventive Maintenance Course."

Now, the thing for you to do is talk it over with your sergeant, training officer or CO. Then your request (DA Form 1049) will go in to attend the maintenance course that'll help you on the road to a maintenance career.



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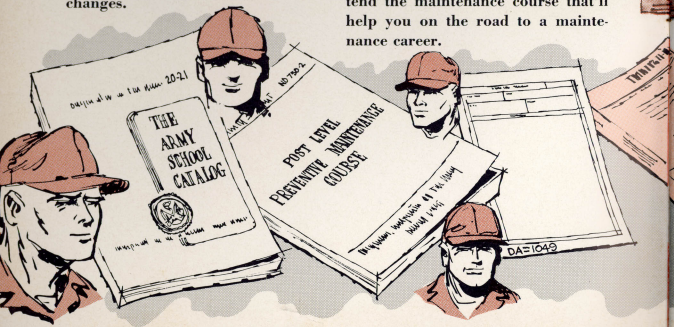

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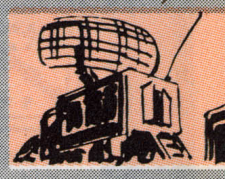

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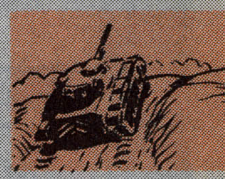

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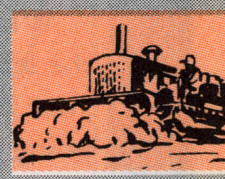

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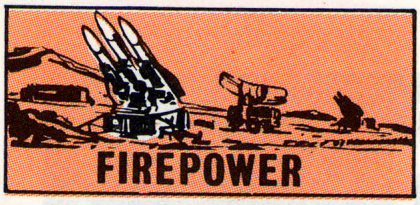


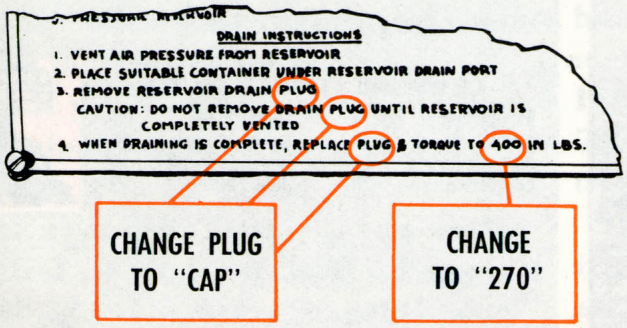
MISSILE

END THE CONFUSION

Remember way back when MWO Ord Y75-W63 (21 Apr 60) hit the scene? This is the one in which support put some metal identification and instruction plates on your Nike-Hercules launcher for use with its hydraulic system.

Then along came MWO Ord Y75-W78 (8 Aug 63) and your support people added some bleeder valve assemblies to the launcher. When this MWO is applied, the plug on the bottom of the hydraulic reservoir is replaced by a steel tube with a cap on the end.

Trouble is . . . the instruction plate put on by MWO Ord Y75-W63 tells you to remove the plug to drain the reservoir and to torque the plug to 400-in-lbs after you put it back in. And, as you know, there's a caution note on the instruction plate that tells you: "Do not remove drain plug until reservoir is completely vented."



You can bring your instructions up to date with a ⅜-in metal stamp set and a hammer. Just "X" out the word "plug" wherever you find it and stamp in "cap" above it.

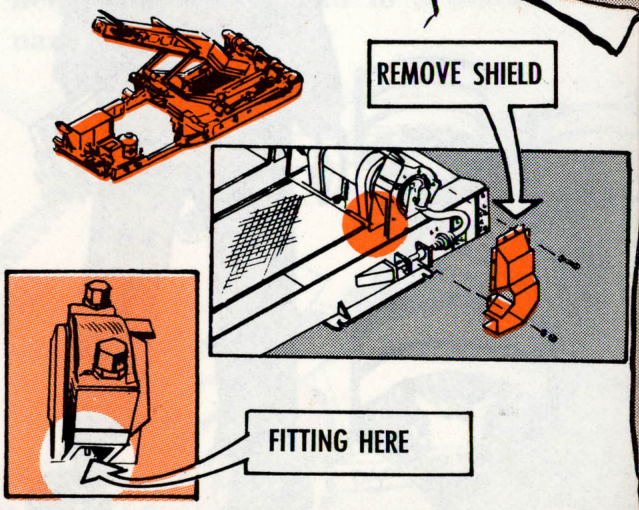
When you've blocked out "400" and stamped "270" above it, you're in business.

IT'S HIDDEN

OK . . . so you can't see it. But LO 9-1400-250-20 shows you that it's there.

What's where? The lube fitting on the left-hand main trunnion bearing of your Nike-Hercules launcher. If you're going to hit the fitting with GAA monthly the way it says on page 6 of the LO, you have to remove the shield from the end of the main trunnion.

If MWO ORD Y75-W6 (18 Jul 60) hasn't been applied to your launcher the fitting's not covered by the shield.



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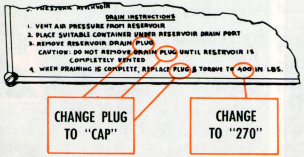

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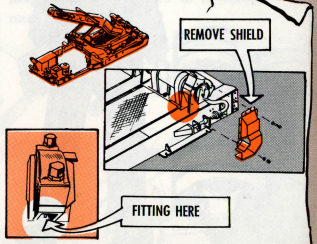


CLEAN SWEEP

Any Nike missileman will admit a hole in the ground is a natural trap for sand, grit, wire, wood and what have you. So it figures the pit'll get a regular hosing.

But before you shoot the works it's a good idea to sweep the pit first, so the grit won't be washed down into the sump and get sucked in to the pump.

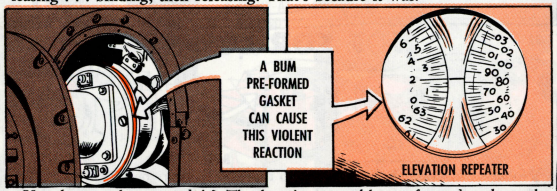
The clean-sweep treatment also goes for the pump sump, below the pit floor —only more so!

Those local purchase pumps just won't work like the disposal unit in a kitchen sink. Let 'em get jammed with grit and they'll burn out on you for real.

IN A BIND? SHAPE UP

Hear about the doozy this one outfit ran into?

When they ran the elevation aided operation checks on their Nike-Hercules missile track radar, the antenna response showed up on the elevation repeater like it had the heebie-jeebies. It jerked like something was binding, then releasing . . . binding, then releasing. That's because it was.



You know what caused it? The housing assembly pre-formed gasket—the one on the same side as the radar's telescope mount . . . that's what.

The gasket was out of shape—like'll happen when it's stretched to here and gone to get it on instead of being fitted slow and easy.

A new gasket—one that was put on careful like—took care of the situation.

BULLETIN BOARD

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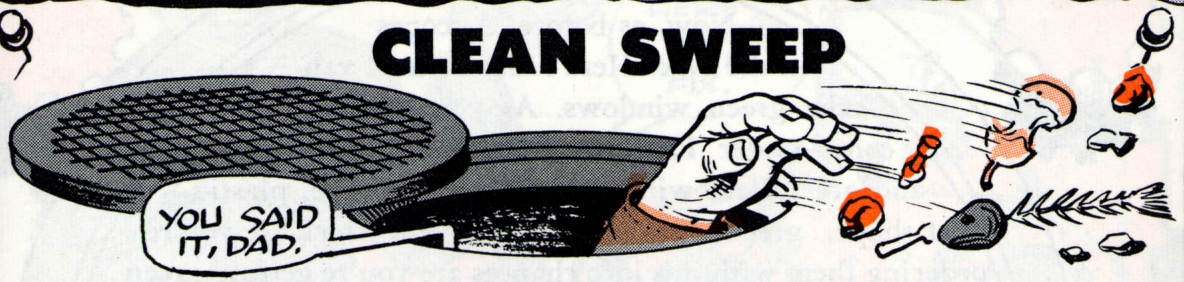

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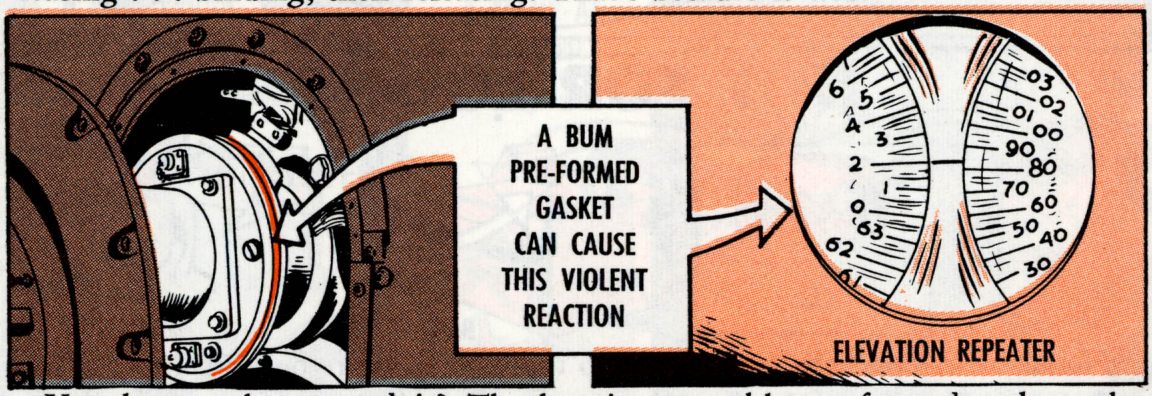

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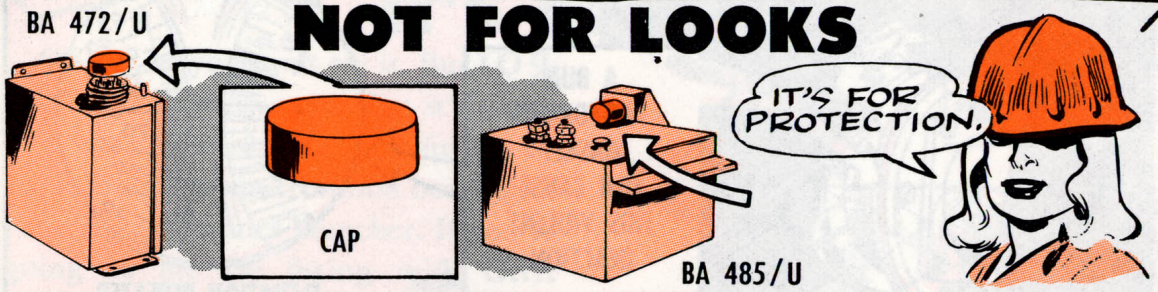
LITTLE GREEN WINDOWS

Now, as before, A-scopes in the Nike-Herc radar control van take green windows. As you know, they come under FSN 6625-500-3502 (7604460), and are called, window, cathode ray tube, plastic, cyl shape, green, 5½-in dia. and ⅛-in thick. If you're ordering them with this info chances are you're getting green ones. But, if you should ever draw a clear plastic one, don't try to darken it with any kind of filter. Send it back to support pronto. They should go back to depot with a note saying that the clear plastic windows are marked wrong, since there's no acceptable substitute for the green windows. Getting in a DD Form 6 (Report of Damage or Improper Shipment) might also help track down and straighten out the mix-up.

NOT FOR LOOKS



No sir-e-e-e, Bob. The protective cap that comes with your BA-472/U, BA-485/U and BA-485A/U Nike-Hercules missile batteries is just what the name says—protection. The cap keeps junk out of the battery electrical connector and protects the pins whenever the battery's not hooked up to the missile.

In other words, keep the cap handy so you'll have it when it's needed for both protection and shorting.

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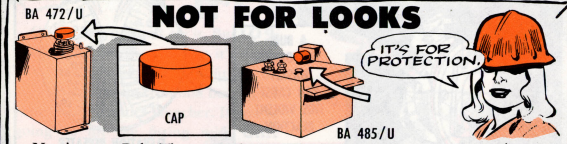

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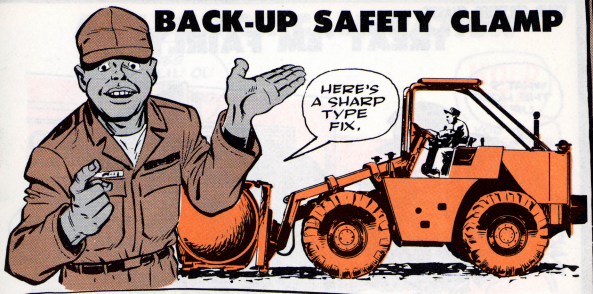
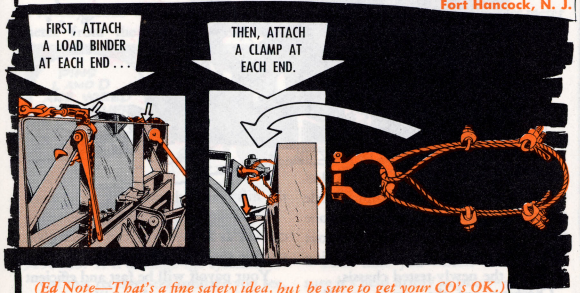


Dear Editor,

You just can't be too safe around a missile site—but you can get gigged easy for not being safe enough.

Here's how we clinched the safety deal when carrying M409 warhead section containers with our 10,000-lb rough terrain truck. In addition to using two load binders (FSN 3990-250-6356) to hold the M409 to the mast, we use two "C Battery clamps"—a gadget dreamed up by a couple brains in the outfit. Now everybody's happy—the inspectors and the M409, which rides easier.

"C Battery Untouchables"
Fort Hancock, N. J.



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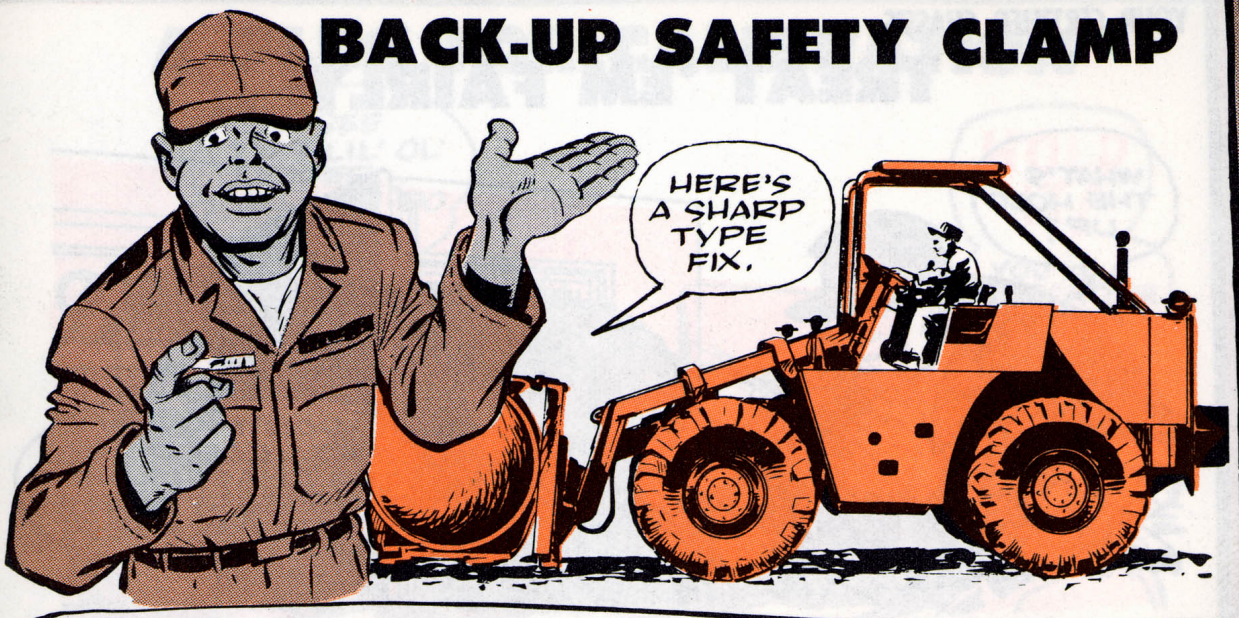

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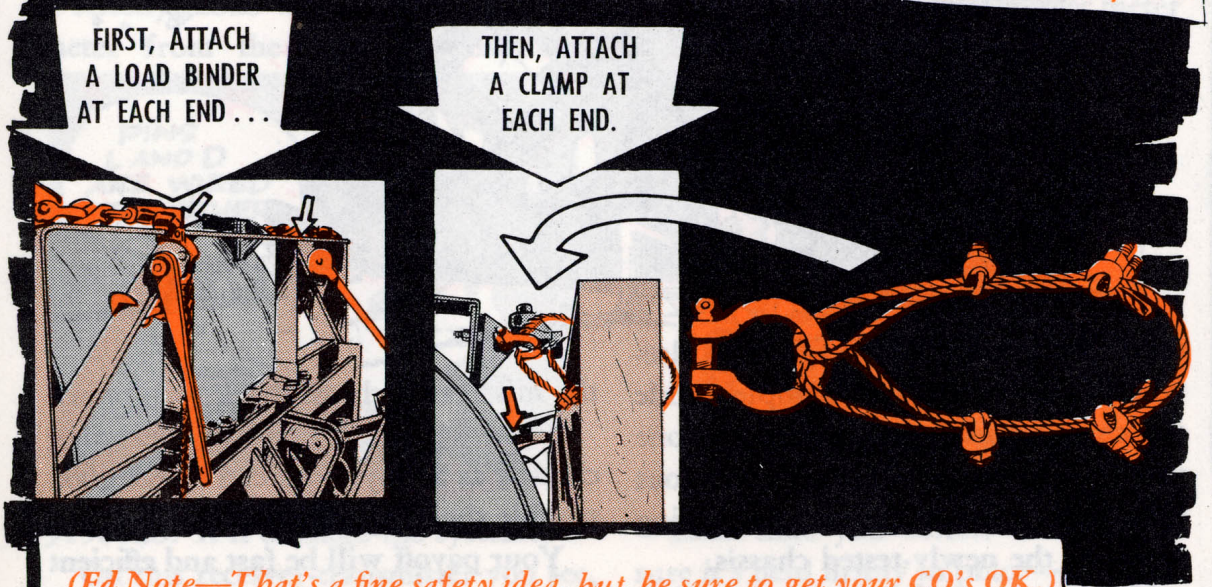

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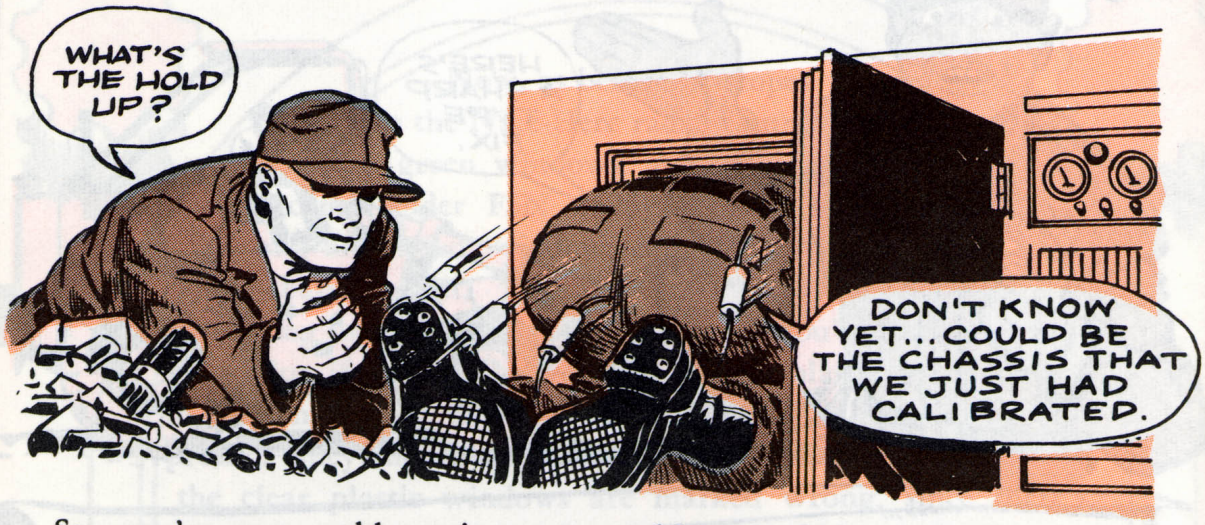
YOUR CERTIFIED CHASSIS . . .

TREAT 'EM FAIRLY

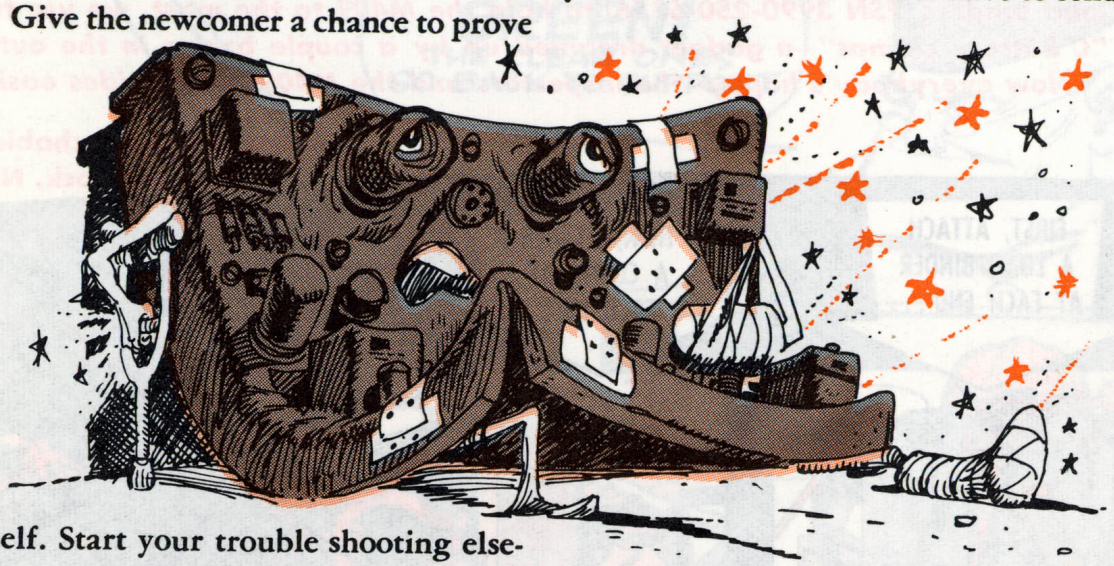


So—you've got problems in your Nike-Herc system right after installing a chassis that's just been calibrated or comparison checked!

That's not good, but don't get grabby or too hasty with your accusations.

Give the newcomer a chance to prove itself. Start your trouble shooting elsewhere in the string. For example, tackle the chassis ahead and behind the one you've just put in. If they check out OK, then you can point an accusing finger at the newly-tested chassis.

Checking out the newly installed chassis **first**, can easily add to your problems (and increase support's workload). 'Cause if the chassis is OK to begin with, you can easily throw it out of adjustment as you try to run down a problem . . . which isn't there. Then you have no choice. You'll have to send



the mistreated chassis back to support.

So make a note: When swapping chassis, as always, you can't beat good trouble shooting procedures.

Your payoff will be fast and efficient maintenance . . . and, you'll ease your load, and everyone else's.

YOUR CERTIFIED CHASSIS . . .

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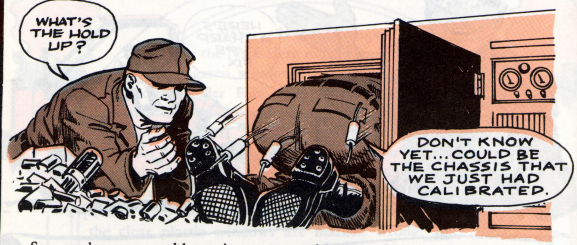

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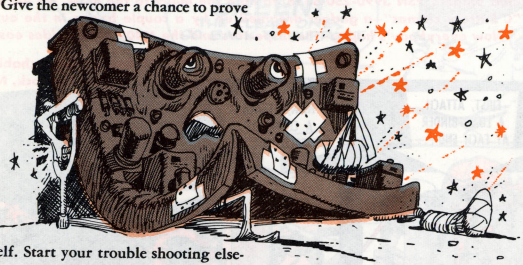


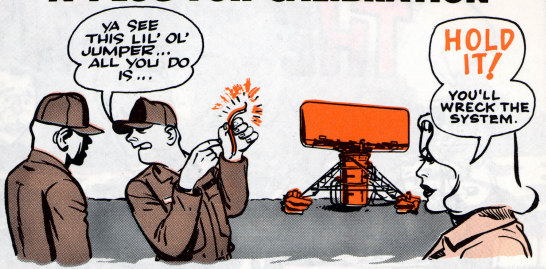
itself. Start your trouble shooting elsewhere in the string. For example, tackle the chassis ahead and behind the one you've just put in. If they check out OK, then you can point an accusing finger at the newly-tested chassis.

Checking out the newly installed chassis **first**, can easily add to your problems (and increase support's workload). 'Cause if the chassis is OK to begin with, you can easily throw it out of adjustment as you try to run down a problem . . . which isn't there. Then you have no choice. You'll have to send the mistreated chassis back to support.

So make a note: When swapping chassis, as always, you can't beat good trouble shooting procedures.

Your payoff will be fast and efficient maintenance . . . and, you'll ease your load, and everyone else's.

A PLUG FOR CALIBRATION



Sure you know!

On your Improved Nike-Hercules Acq receiver-transmitter, 8515397, you simply tie a jumper lead between TB 5-5 and TB 5-7, when you pull the frequency-and-power meter, 8173152, for calibration. And, then you make sure you remove the jumper wire before you replace the meter.

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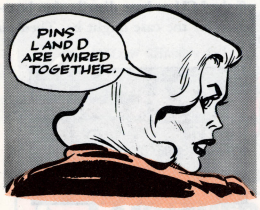
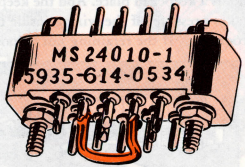


9156628? It'll damage the system.

On this receiver-transmitter you see, there's the AJD to consider. Its wiring hook-up changes things a bit. You have to use a plug to keep things orderly while the meter's out for calibration.

Support'll get the plug (Connector, electrical, FSN 5935-614-0534) for you. But you have to ask for it on a DA Form 2407 (Maintenance Request), 'cause before you use it support has to wire the plug's L and D pins together.

Once the plug is wired, like so, all you have to do is plug it in when you remove the frequency-and-power meter for its 90-day C check.



PINS L AND D WIRED TOGETHER

Each time you install the plug be sure it's held firmly in place—if it dangles or moves around it could cause shorting.

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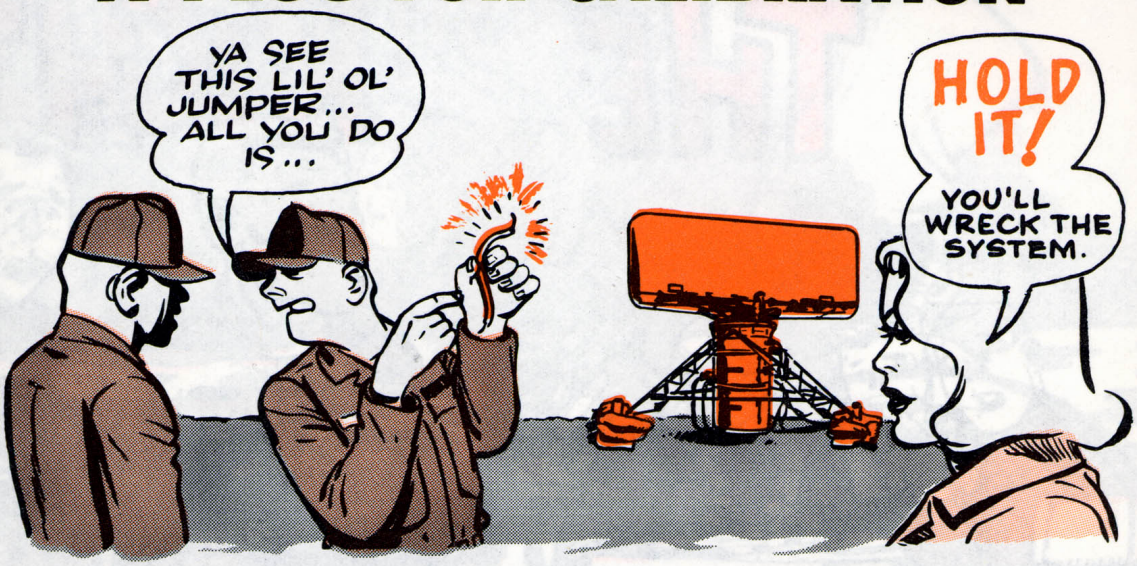

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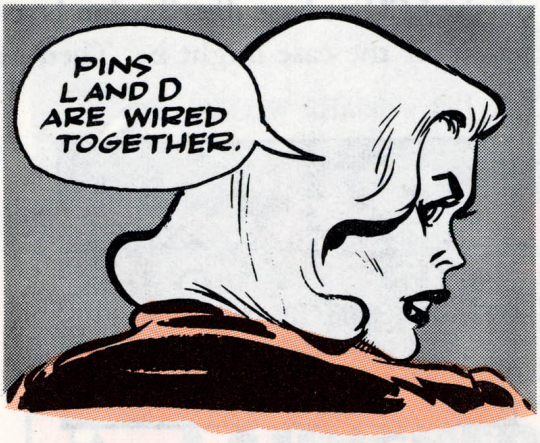

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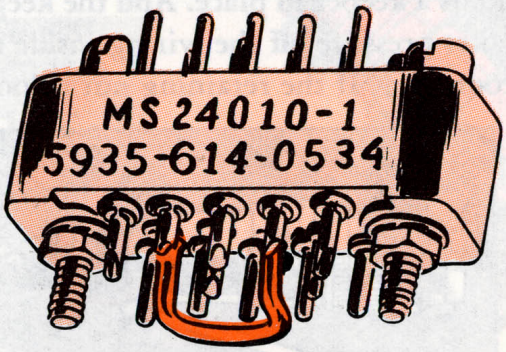

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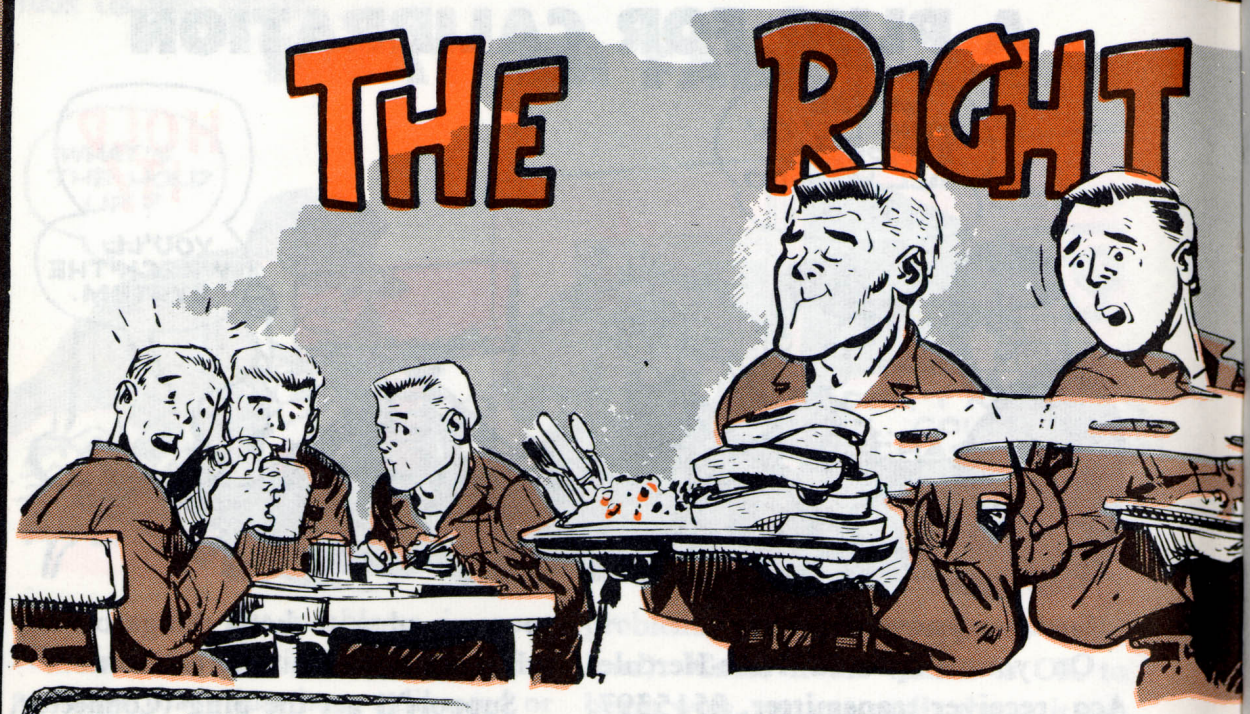
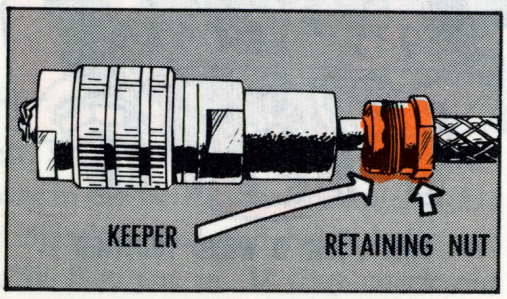


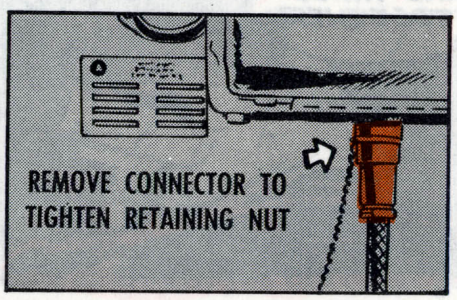
It's the little things in life that count.

And if there ever was a perfect f'rinstance of this, your Hawk LCU cable connectors are it. A little thing like taking a few seconds to see if the components of the connectors are tight can spell the difference between having connectors that're in good shape and having some with busted wiring inside.

The retaining nut is one of those important components. It's called a retaining nut for a good reason . . . it holds a keeper in place. And the keeper takes pressure off the wiring inside the connector. If the retaining nut is loose, so is the keeper. This way, whenever you move the LCU around, or take the connector from the LCU or base distribution box, a heap of tension is put on the wiring.



The best way to tighten a loose retaining nut is to take the connector off the LCU or base distribution box—whatever the case might be. Then put a wrench on the connector shell and another on the nut and tighten those left-hand threads until you get a snug fit.



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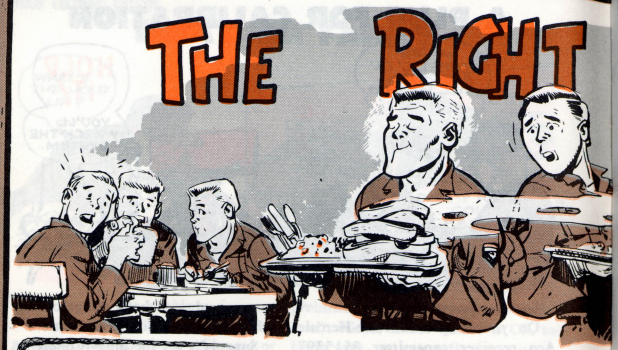

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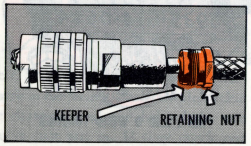

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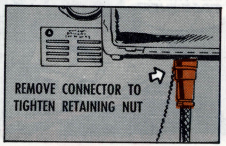
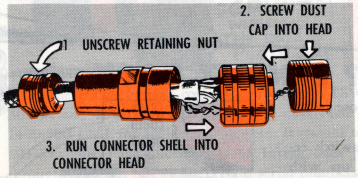
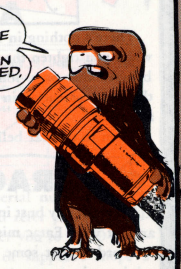


If you give the connector shell a twist and find it's loose, tightening it is a little more involved than when the retaining nut only is loose—but it's worth the effort. A loose connector shell can also lead to busted wires.

What you do to tighten the connector shell is first remove the connector from the LCU or base distribution box—depending on which connector needs the work. Then unscrew the retaining nut all the way out. Next screw a dust cap into the connector head . . . and then run the connector shell into the connector head. Put a wrench on the dust cap and one on the connector shell. Turn away until the connector shell fits snugly. You're in good shape after you run the retaining nut in and tighten it.





LAUNCHER LUBE CHANGE

Packing the wheel bearings on the Hawk launcher is no longer a monthly chore. A change to LO 9-1440-500-12/1 (7 Feb 64) says to pack 'em annually or at 12,000 miles, whichever hits first.

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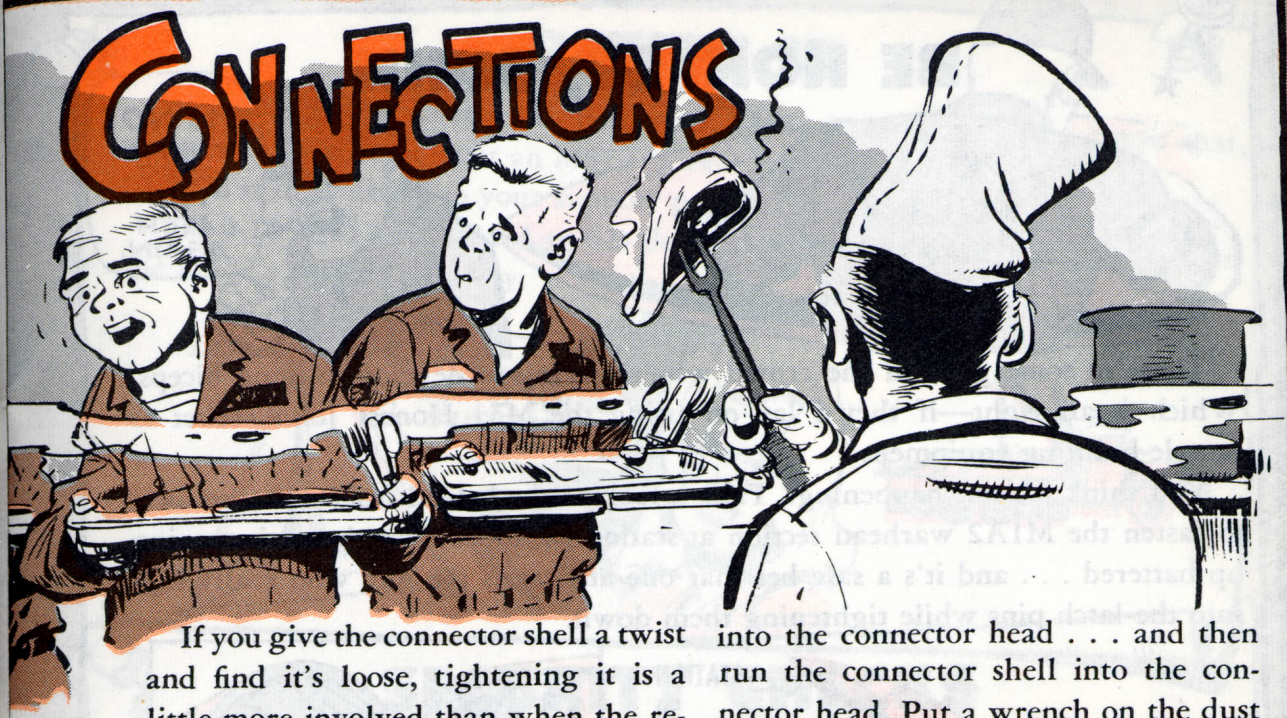

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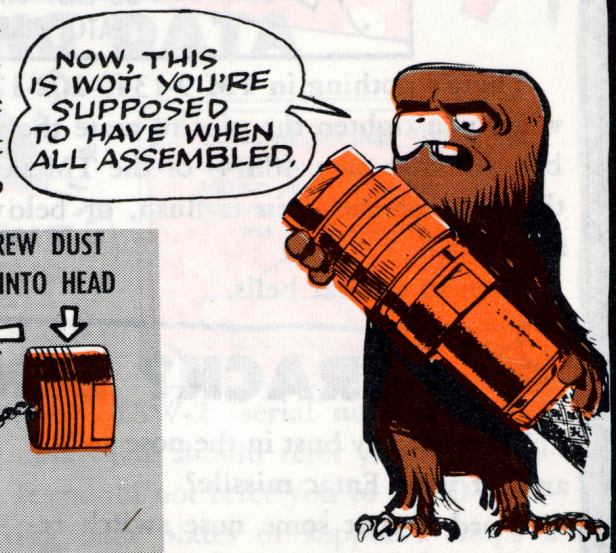

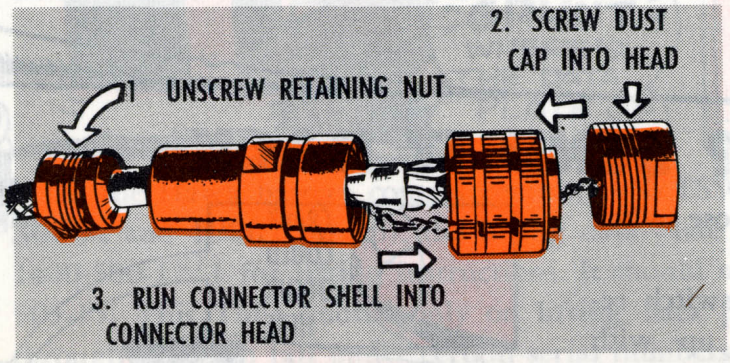

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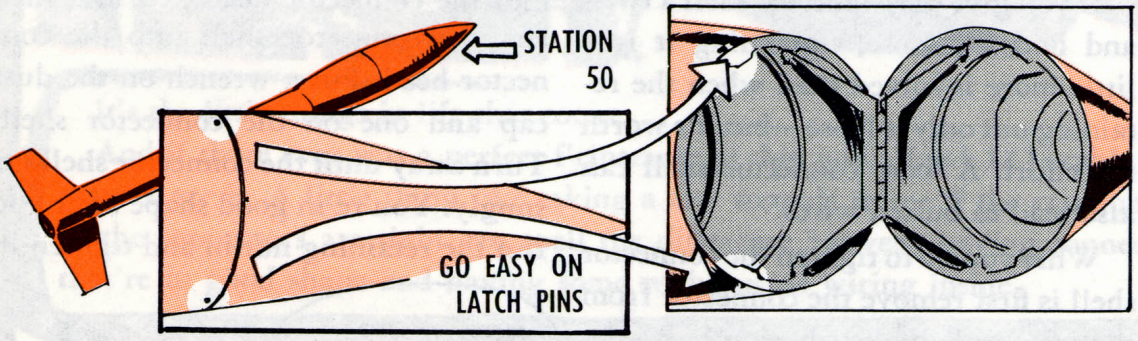
BE HONEST, JOHN

There're some guys in the crowd who're trying to develop bulging biceps. Which is all right—if they'd lay off using the M31 Honest John rocket as muscle-building equipment.

You think it's not happening? Take a look at the helical inserts that're used to fasten the M1A2 warhead section at station 50. More'n one insert is turning up battered . . . and it's a safe bet that one answer is the guy who really lays into the latch pins while tightening them down.



There's nothing in TM 9-1340-202-12 that tells you to give one final grunt when you tighten the pins to mate the warhead section to the nose shell assembly. All that para 48h(4) of the TM says is "Screw the latch pins inward until the head of each pin is flush, or below, with the exterior of the nose shell assembly."

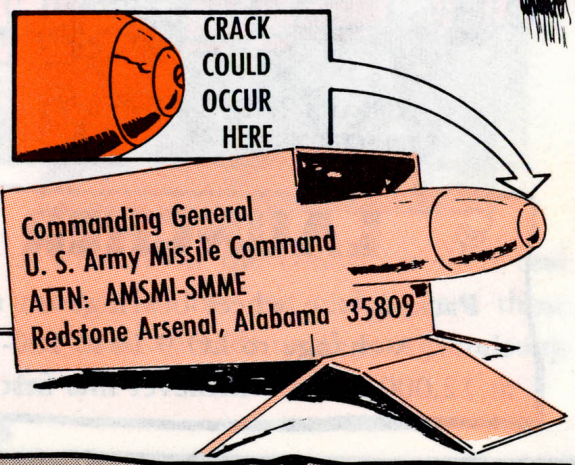
Then to the bar bells.

CRACK? SEND IT BACK

You spot any bust in the nose switch area of your Entac missile?

Word is that some nose switch retaining rings are turning up with cracks . . . and that's not good.

When you run into this situation, send the missile back up the supply line and get the word on a DA Form 2415 to:



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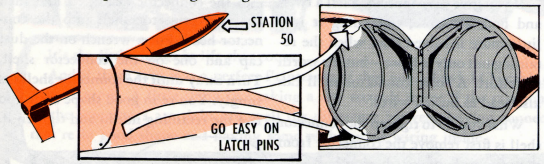

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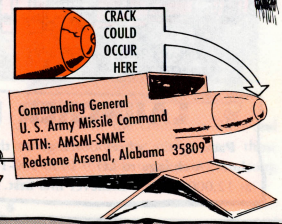

RETIRE IT

Been wondering what to do with your XM31 hoisting unit tripod now that your Littlejohn outfit's got an M572 rocket handling unit?

Turn it in as excess to your support people.

TM 9-1055-212-20P (31 Aug 62) doesn't even mention the XM31 now that the M572's joined the Army.

SECURITY CHECKS

Don't just let it lie there, or stick it on the shelf. When Change 3 (8 Jun 64) to TB 9-131-2 comes your way, best quick-like update your copy of the basic TB. It's sure to help you keep the security poop straight on whatever missile or rocket equipment you have.

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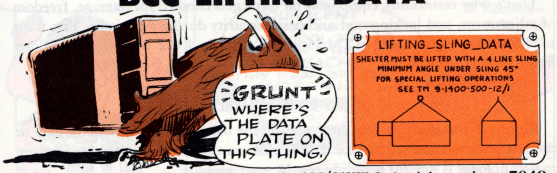

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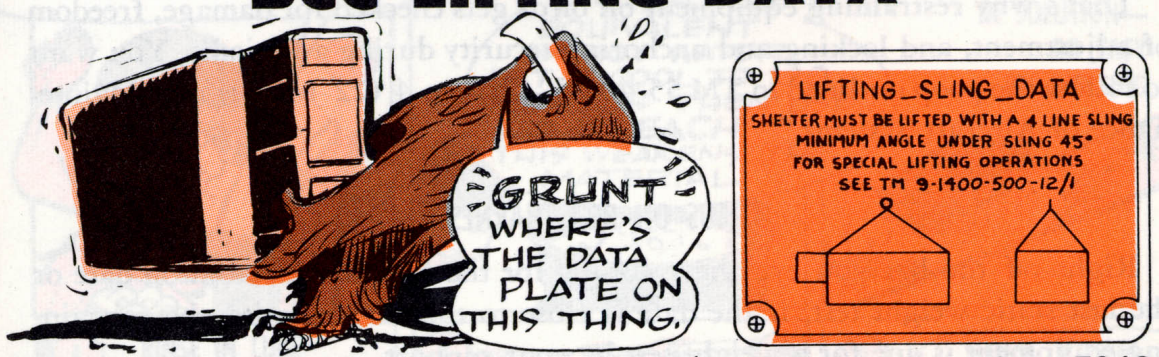

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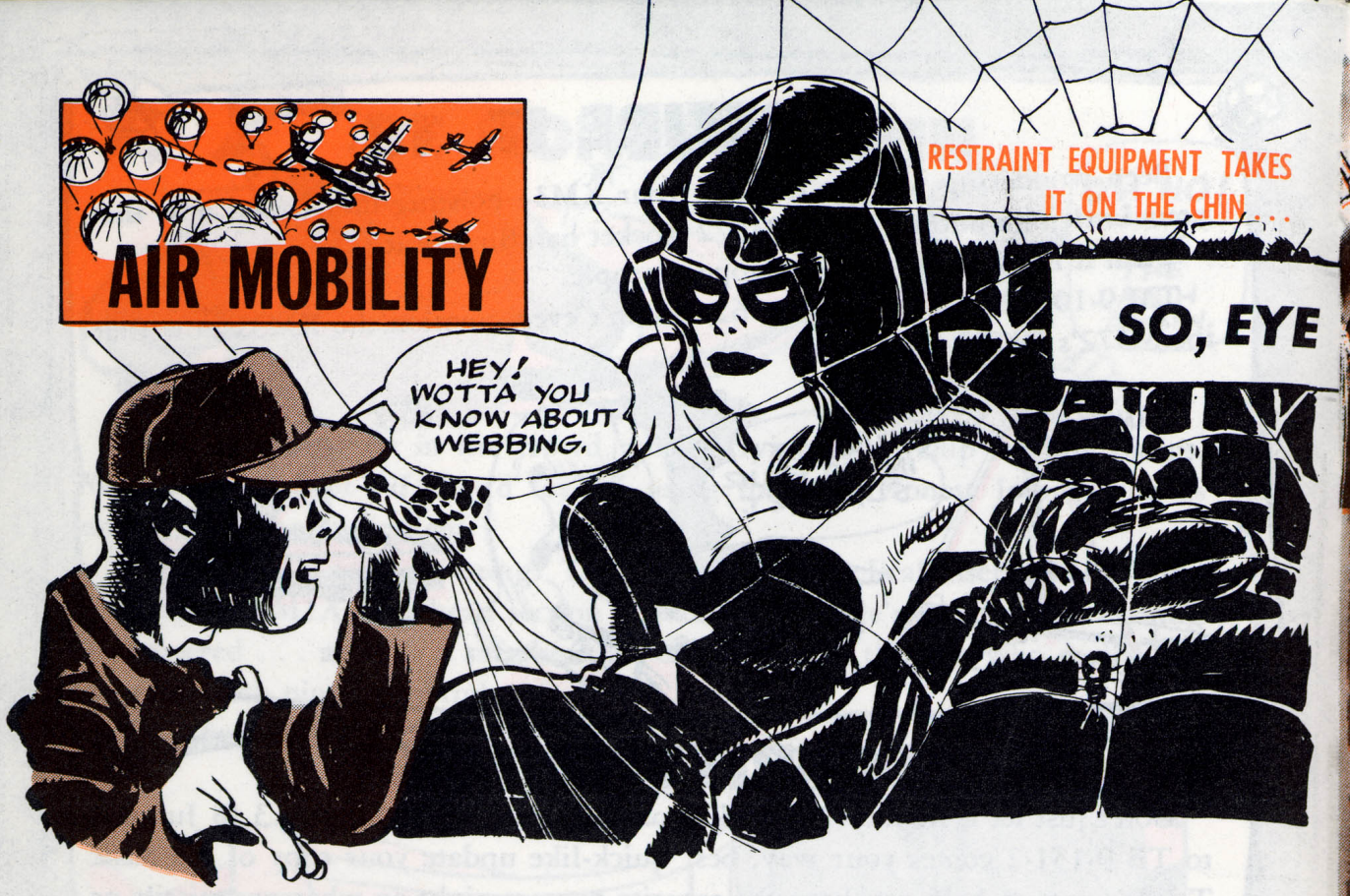

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That's why restraining equipment on birds gets checked for damage, freedom of adjustment, and locking and anchoring security during a Periodic. You want to follow the poop outlined in TM 55-405-3, Change 4 (22 Jul 64) on "Maintenance of Aircraft Systems."

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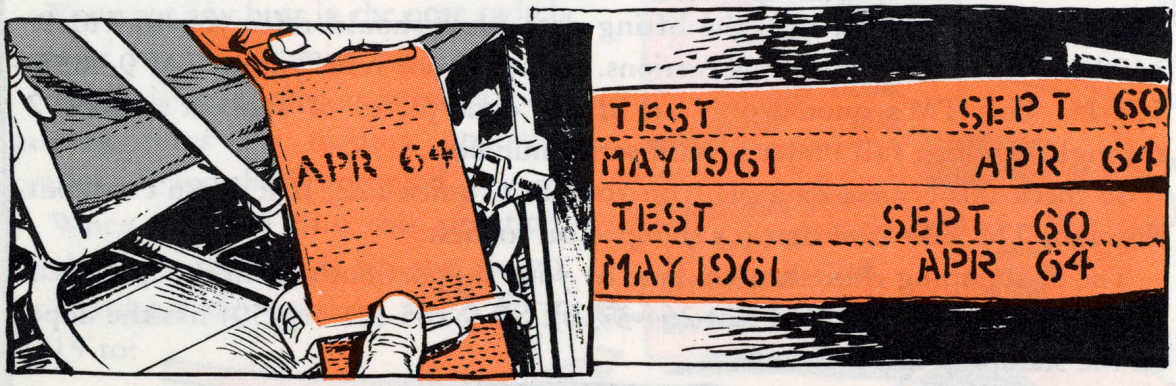

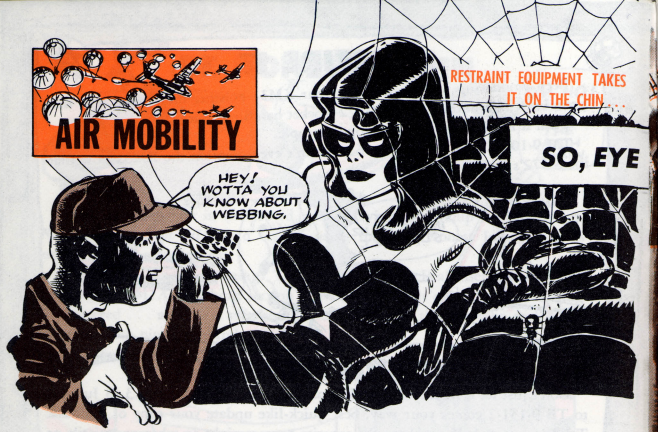

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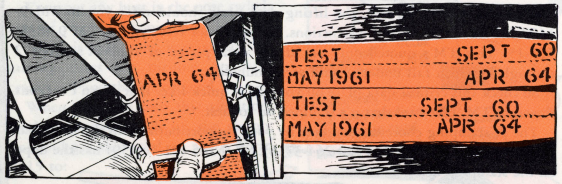
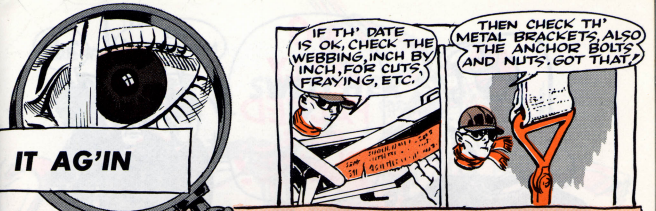
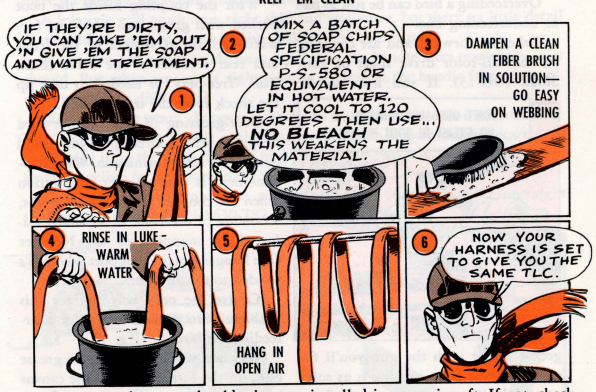




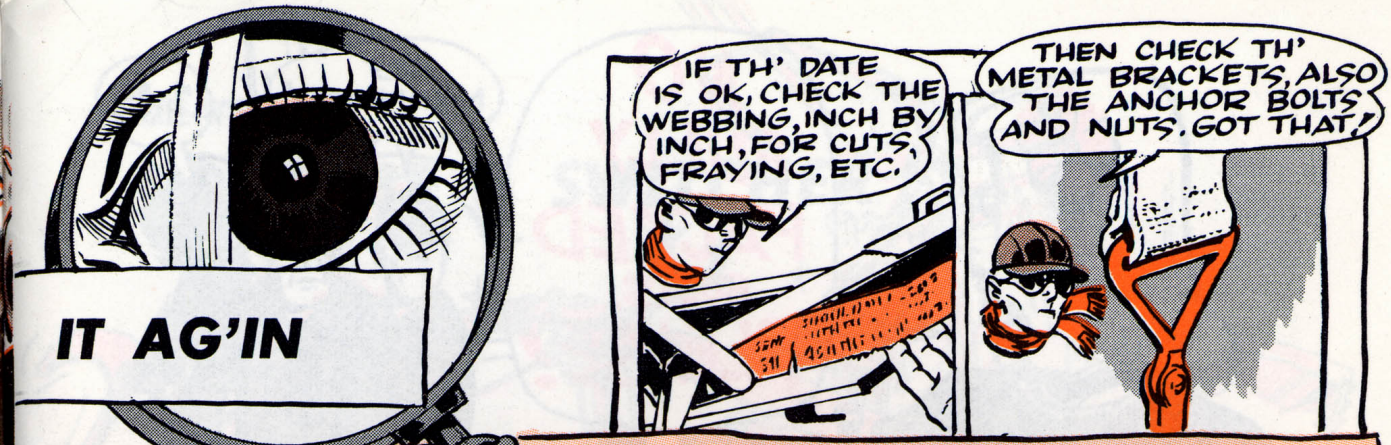
BELT AND HARNESS (Dacron or Nylon)	TEST INTERVAL (months)	TEST LOAD (pounds)
Safety lap belts, crew	36	1000
Safety lap belts, troop	36	1000
Shoulder harness, crew	36	1000
Shoulder harness, troop	36	500
Safety belt tie-down strap	36	500
Personnel retaining harness	36	500
Safety belts, airline	36	1000

The test interval for Safety Belts (cotton) Airline is every 12 months, with a test load of 1000 pounds.

KEEP 'EM CLEAN



Be sure you've got a shoulder harness installed in your aircraft. If not, check out the Index, DA Pamphlet 310-4, for the MWO that puts the harness in your bird . . . like MWO 55-1520-206-34/10 (22 Jul 63) for the OH-23B, C and D.



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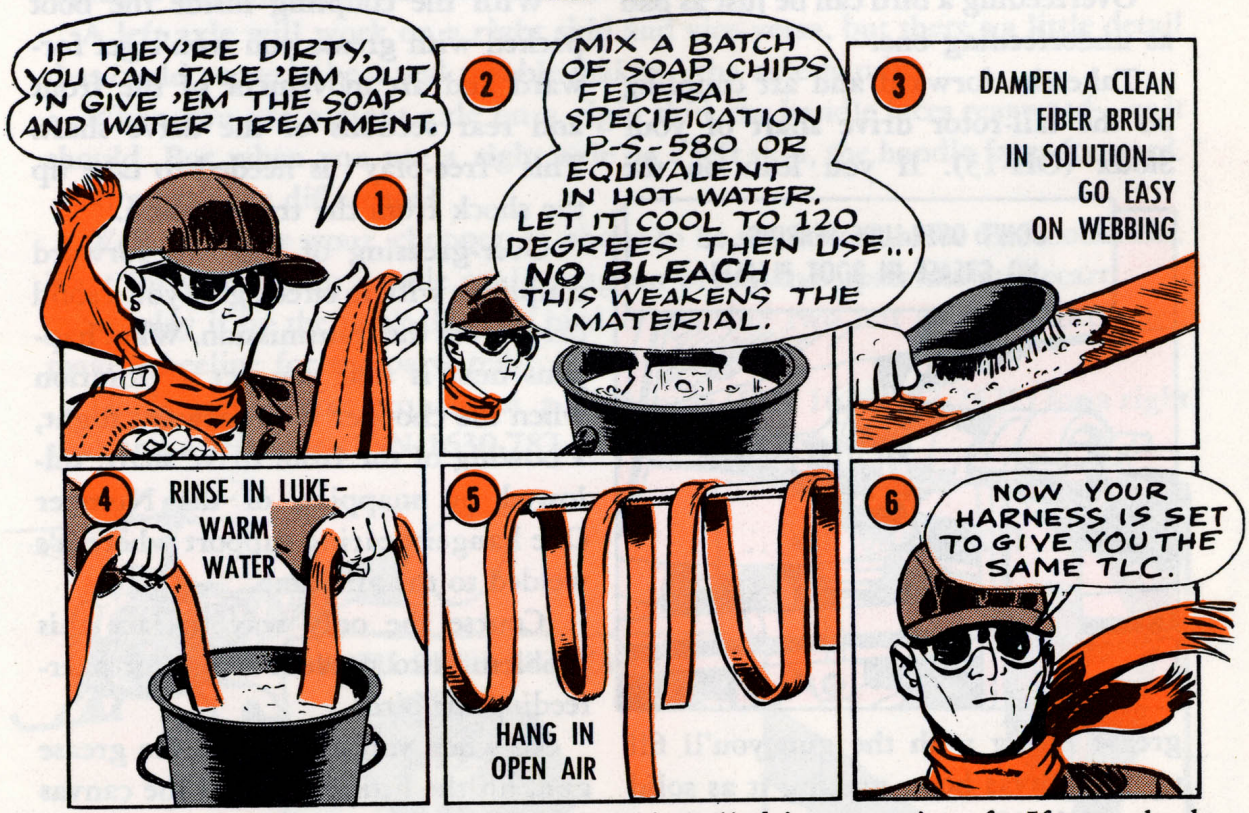
Safety lap belts, troop	36	1000
Shoulder harness, crew	36	1000
Shoulder harness, troop	36	500
Safety belt tie-down strap	36	500
Personnel retaining harness	36	500
Safety belts, airline	36	1000

The test interval for Safety Belts (cotton) Airline is every 12 months, with a test load of 1000 pounds.

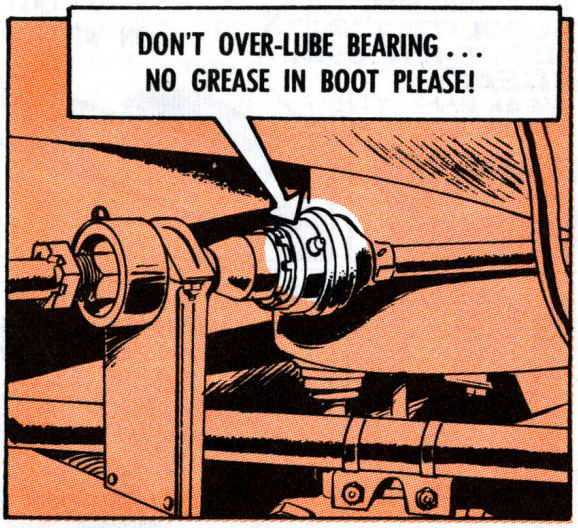
KEEP 'EM CLEAN



Be sure you've got a shoulder harness installed in your aircraft. If not, check out the Index, DA Pamphlet 310-4, for the MWO that puts the harness in your bird . . . like MWO 55-1520-206-34/10 (22 Jul 63) for the OH-23B, C and D.

Overfeeding a bird can be just as bad as underfeeding one.

Take the forward and aft coupling on the tail-rotor drive shaft of your Sioux (OH-13). If you lean on the



grease fitting with the gun you'll fill up the canvas boot, making it as solid as a rock. 'Course the purpose of the boot is to protect the coupling from dirt. It's not a grease reservoir.

With the coupling inside the boot packed with grease you won't get forward and aft movement of the front and rear sections of the drive shaft. This "free-play" is needed to take up the shock from the transmission.

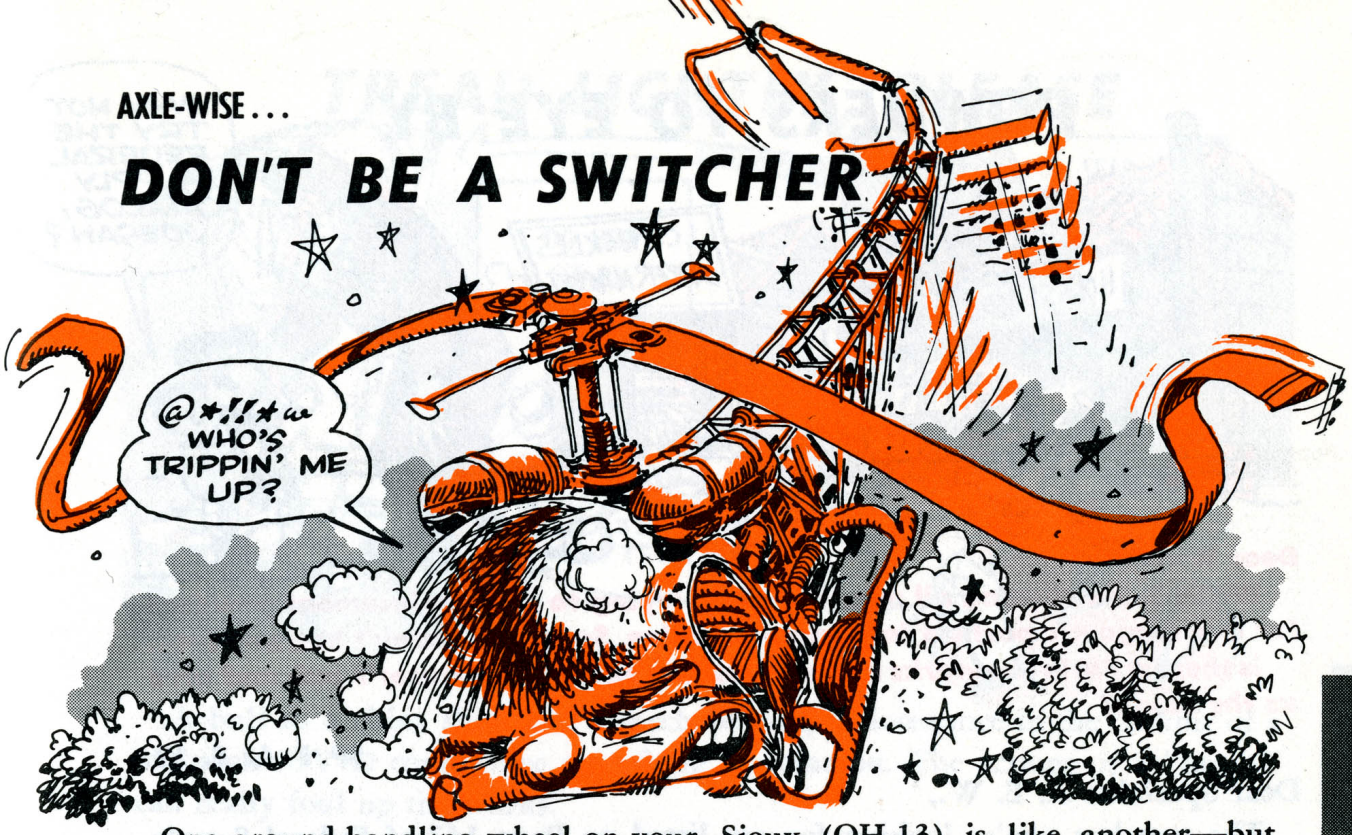
Over-greasing of the two forward couplings will, in effect, give you a solid drive from the transmission. What happens next is that you get a vibration when the chopper is in forward flight, a bowing of the front drive shaft, followed by snapping of the Number One hanger bearing support where it's welded to the airframe.

'Course the only way to face this problem is to prevent it by not overfeeding the bird.

So, when you make with the grease gun, hit the fitting and feel the canvas boot at the same time. Some things should be fully packed—but not the boots.

AXLE-WISE . . .

DON'T BE A SWITCHER



One ground-handling wheel on your Sioux (OH-13) is like another—but there's a mighty important difference in the axle.

A left axle will work on a right skid and vice-versa, but there's a little detail that could prove to be a real trouble maker—the axle handle.

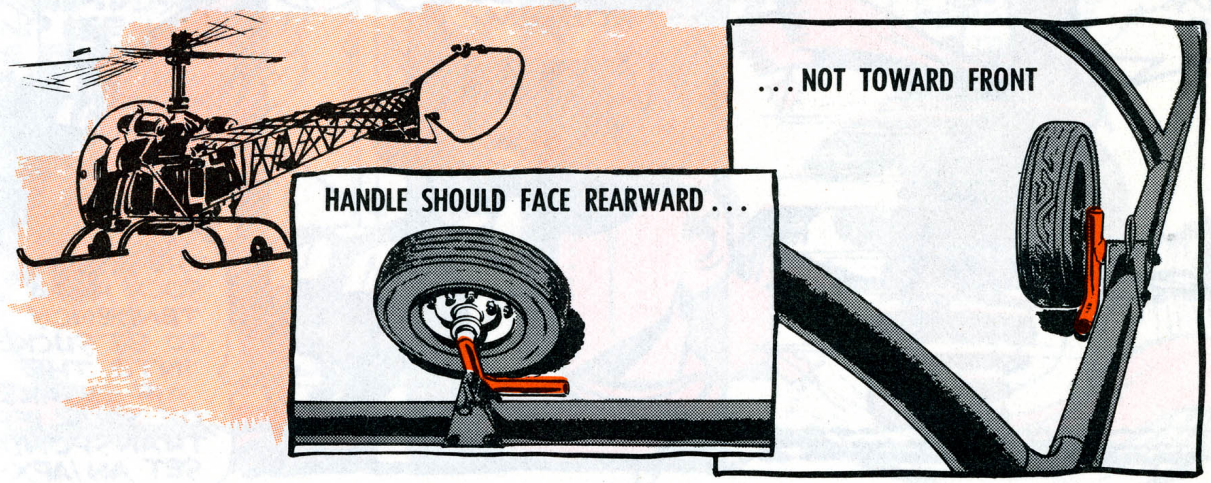
When you use a right axle on a right skid, the handle faces rearward—as it should. But when you use a right axle on a left skid, the handle faces forward.

So what's the difference?

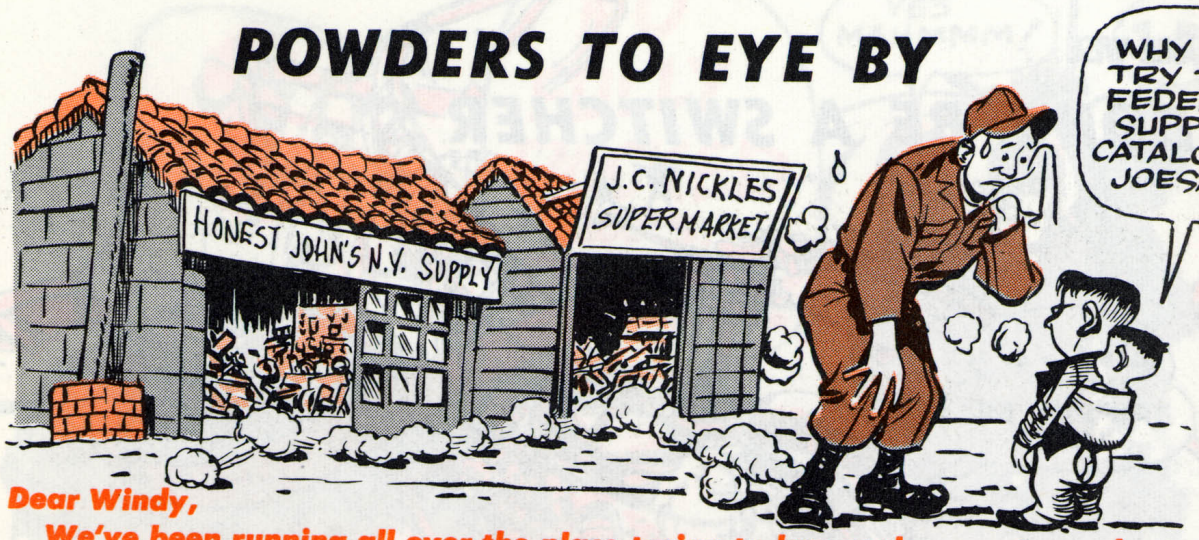
Well, suppose your chopper is about to be set down out in the boondocks. That forward-facing handle could snag on brush and upset the applecart!

So, play it by the book. If your bird is sporting two left or two right axles, make a beeline for the parts pub.

That's right—you requisition a right axle (FSN 1630-787-2527) for a right skid and a left axle (FSN 1630-787-2528) for the left skid.



POWDERS TO EYE BY



Dear Windy,

We've been running all over the place trying to buy replacement powders for our magnetic particle inspection machine. So far we haven't had any luck.

Is there a TM in the works that will replace the manufacturer's pub and give us the scoop?

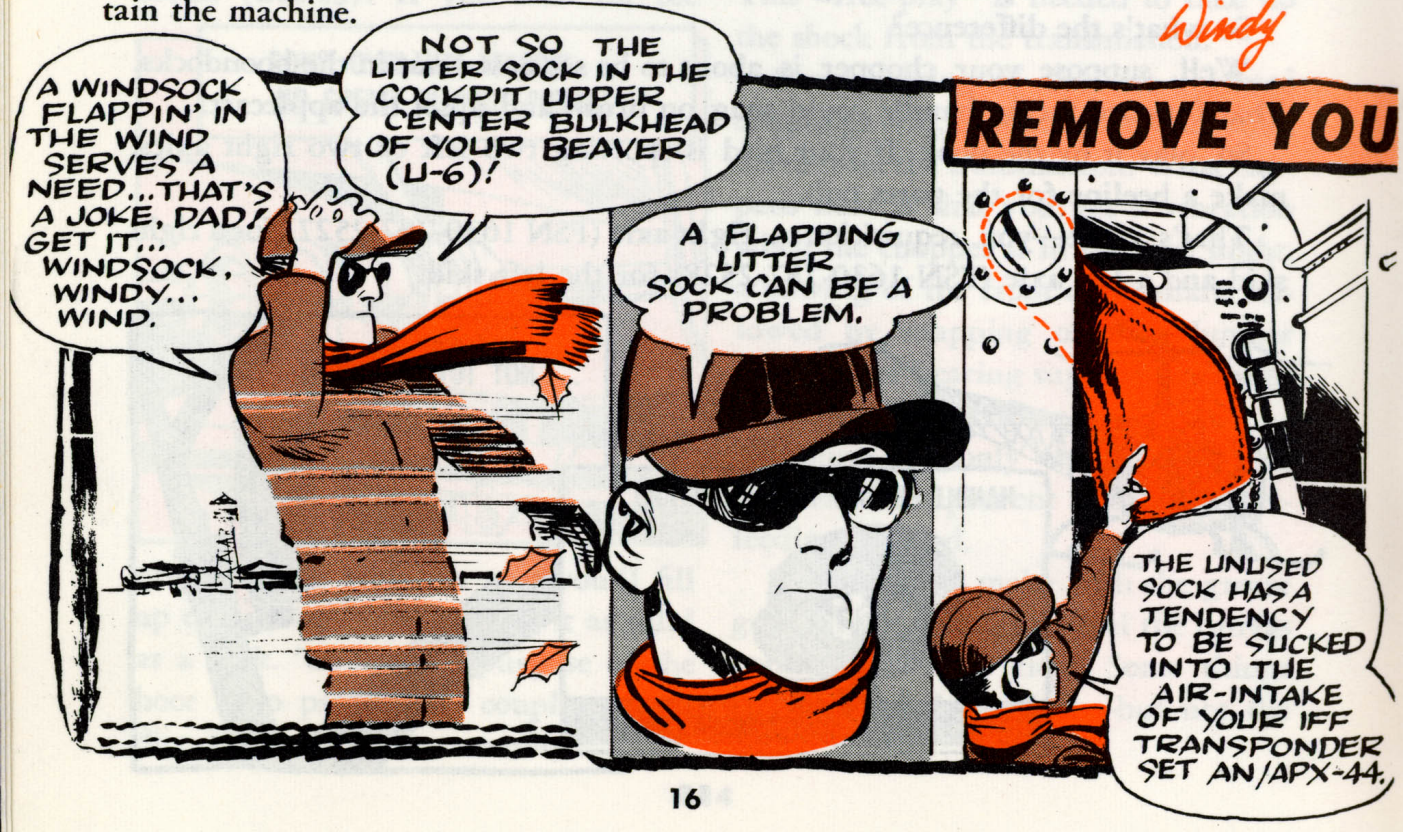
SP 5 A. E. W.

Dear Specialist A. E. W.,

The powders you're looking for are listed on Page 147 of Federal Supply Catalog C6800-IL (1 Jul 64). FSN 6850-255-0451 will get you a 25-lb drum of black powder. FSN 6850-255-0452 will get you the same amount of gray powder and FSN 6850-255-0453 will get you the red powder.

The deal on a TM for this "off the shelf" item is a familiar one. In brief, only a manufacturer's pub is needed to tell you how to operate and maintain the machine.

Windy



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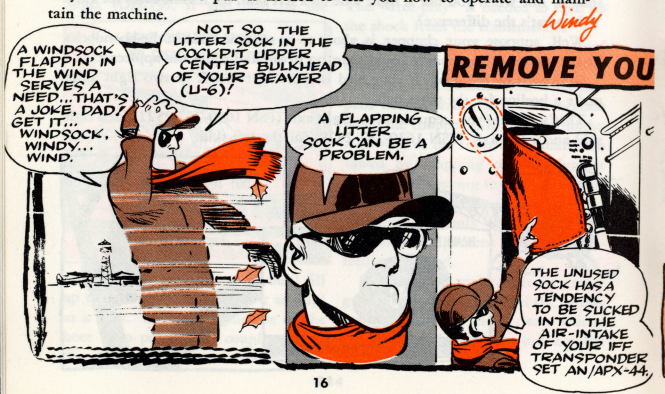
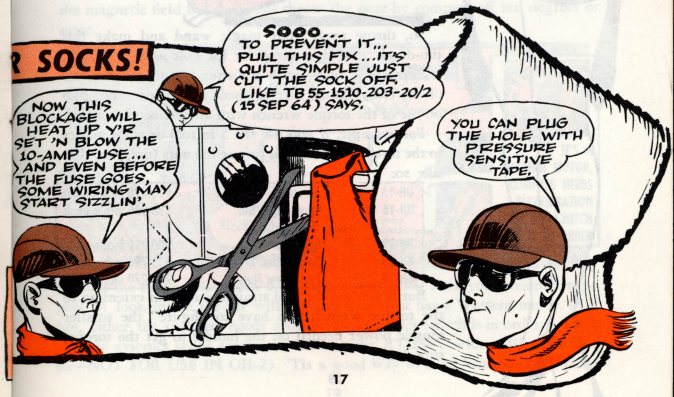


TREAD LIGHTLY, PLEASE

A bull in a china shop and a mech pulling maintenance in the cockpit of a Mohawk (OV-1) could have something in common. The actions of a "heavy" can really foul up the works.

Take the charged ejection seat. Planting yourself smack on the safety pin streamer can put enough force on the connecting cable to bend the ejection gun sear. And if that sear can't be pulled out the seat isn't going to fire.

So-o-o . . . when you're in the cockpit, easy does it. No sitting, pulling, yanking or stomping on the streamer—p-u-l-l-e-a-s-e!



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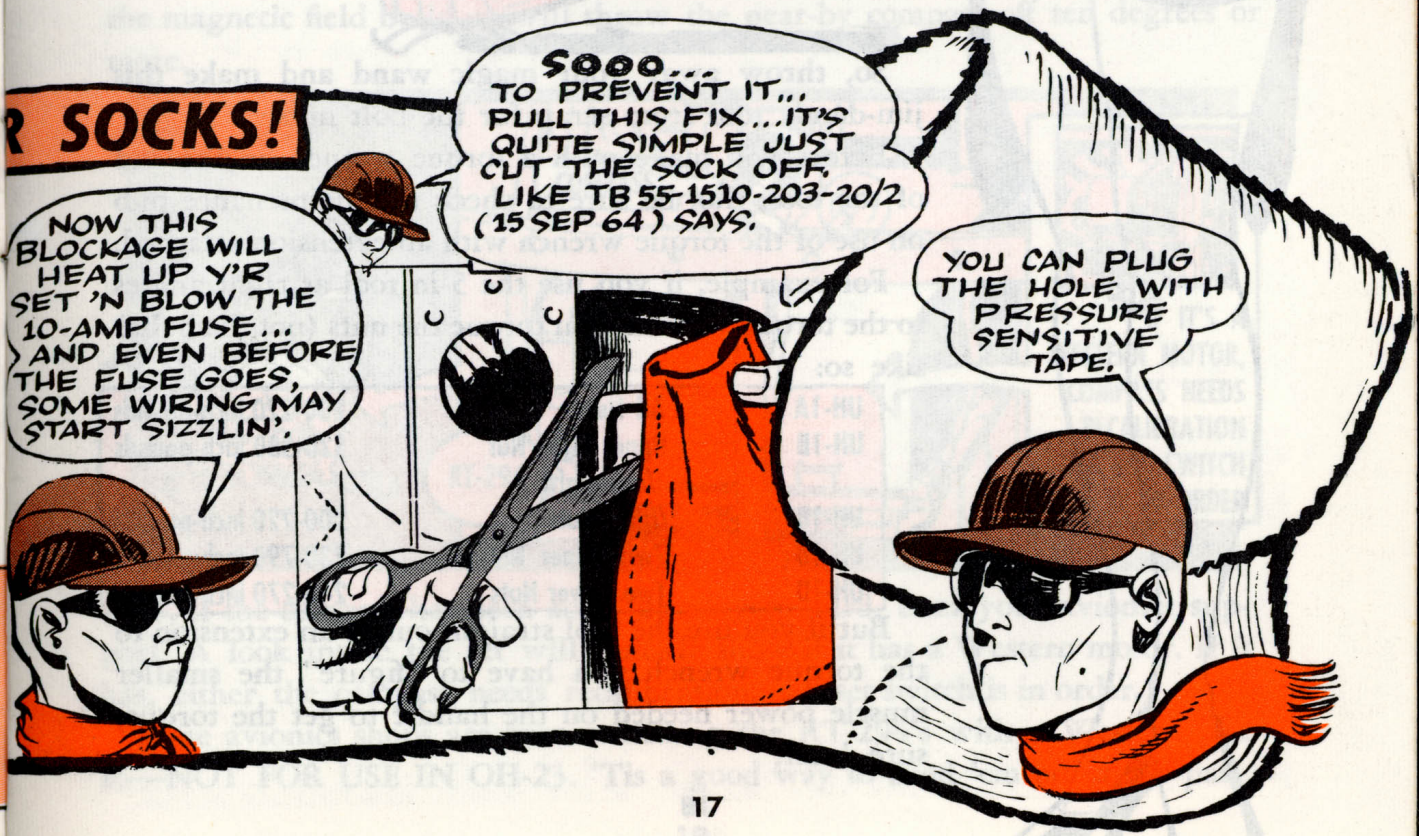
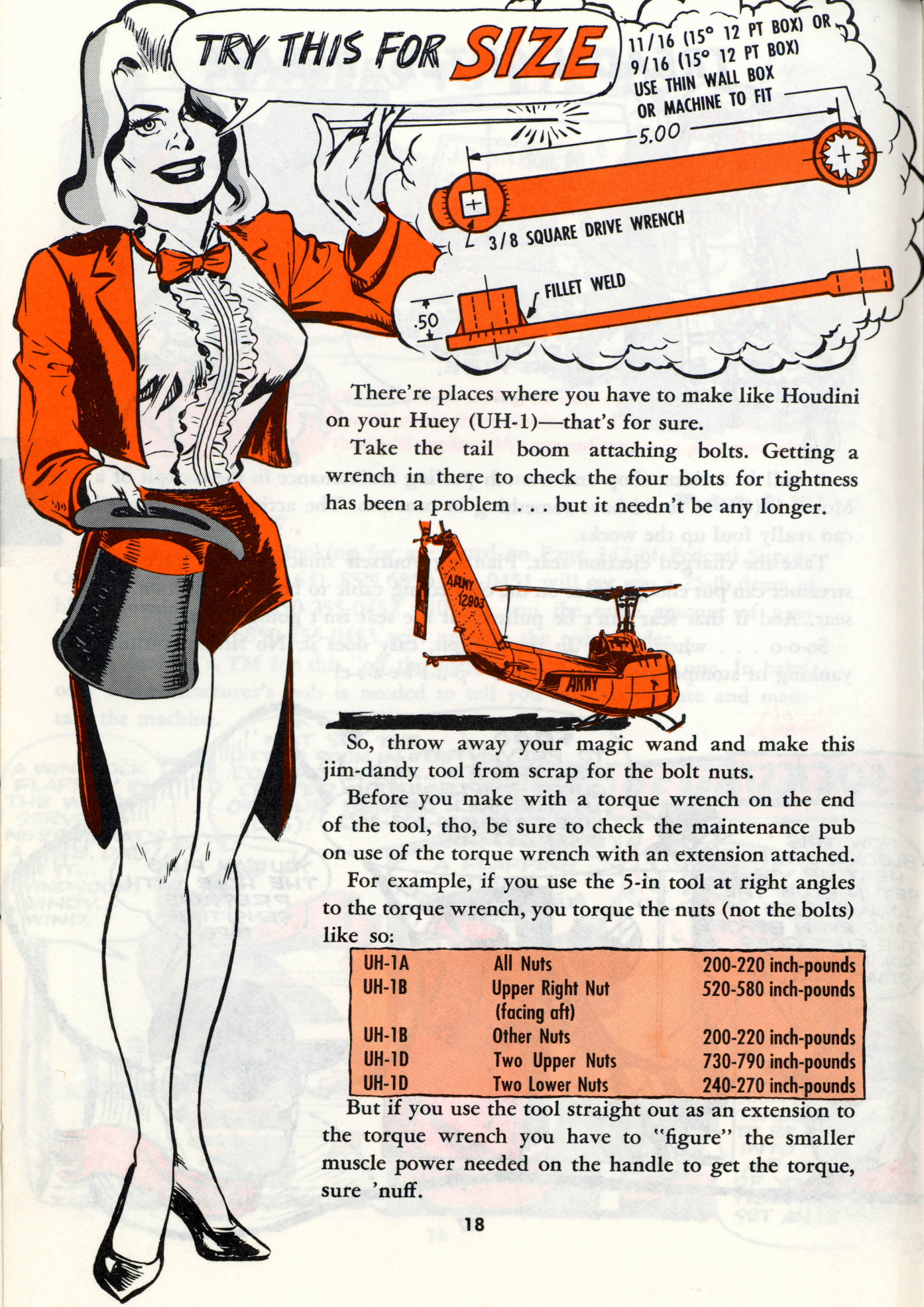




There're places where you have to make like Houdini on your Huey (UH-1)—that's for sure.

Take the tail boom attaching bolts. Getting a wrench in there to check the four bolts for tightness has been a problem . . . but it needn't be any longer.

So, throw away your magic wand and make this jim-dandy tool from scrap for the bolt nuts.

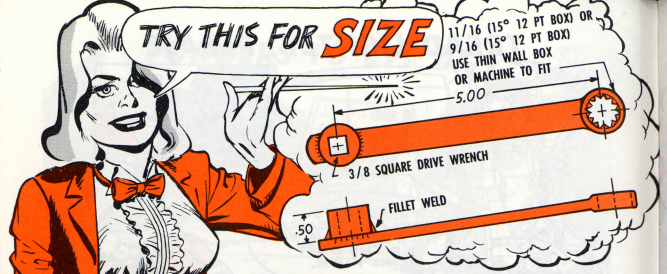
Before you make with a torque wrench on the end of the tool, tho, be sure to check the maintenance pub on use of the torque wrench with an extension attached.

For example, if you use the 5-in tool at right angles to the torque wrench, you torque the nuts (not the bolts) like so:

UH-1A	All Nuts	200-220 inch-pounds
UH-1B	Upper Right Nut (facing aft)	520-580 inch-pounds
UH-1B	Other Nuts	200-220 inch-pounds
UH-1D	Two Upper Nuts	730-790 inch-pounds
UH-1D	Two Lower Nuts	240-270 inch-pounds

But if you use the tool straight out as an extension to the torque wrench you have to "figure" the smaller muscle power needed on the handle to get the torque, sure 'nuff.

TRY THIS FOR SIZE



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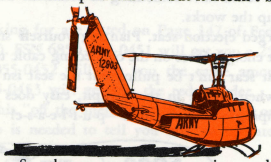

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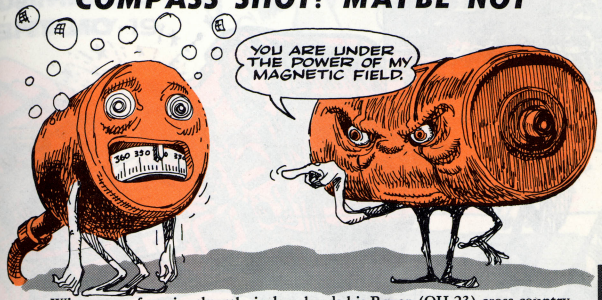
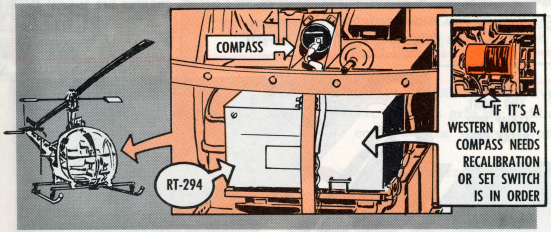
COMPASS SHOT? MAYBE NOT



When your favorite throttle jockey heads his Raven (OH-23) cross country, one of the basic instruments he's betting his hide on is the magnetic compass . . . and rightly so.

A faulty compass, therefore, could strand him "somewhere in the boondocks." And that's just about what'll happen if the RT-294 of your AN/ARC-44 FM radio set has a Western main tuning gear drive motor.

The magnets in this motor are extra strong. Fact is, they're so strong that the magnetic field build-up will throw the near-by compass off ten degrees or more.



So, if the compass has been actin' up in your bird, buzz your avionics support. A look inside the set will quickly show if it has a Western motor. If it has, either the compass needs recalibration, or a set switch is in order.

Some avionics shops are even stenciling the RT-294's with a Western like so—NOT FOR USE IN OH-23. 'Tis a good way to head 'em off at the pass.

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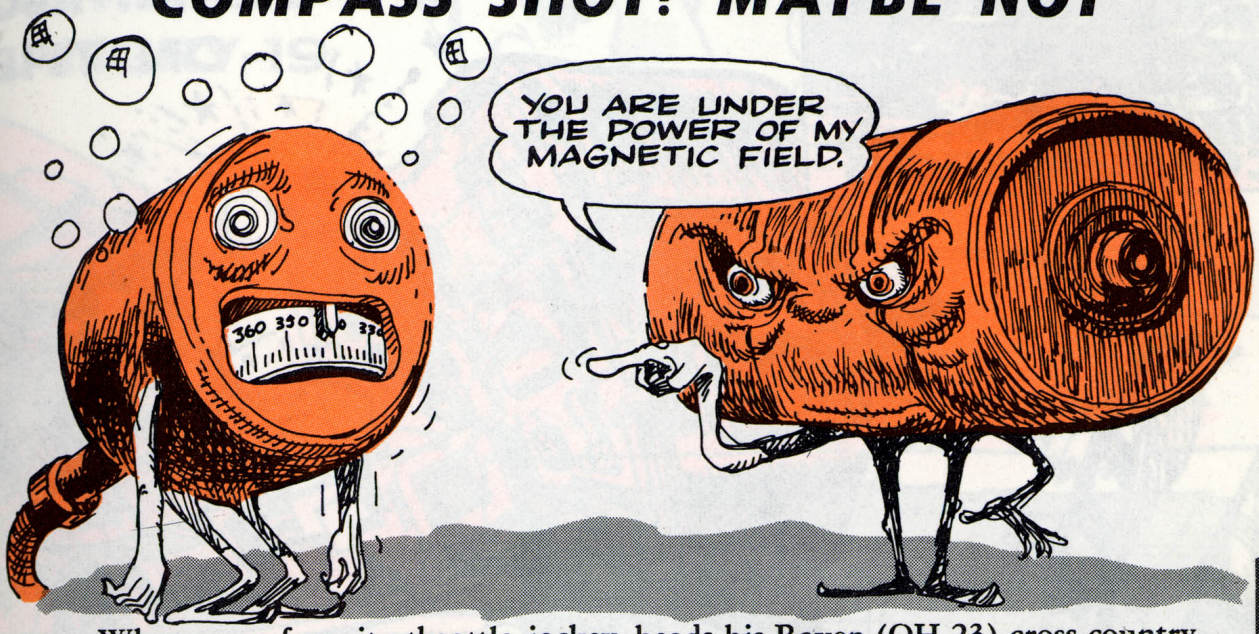

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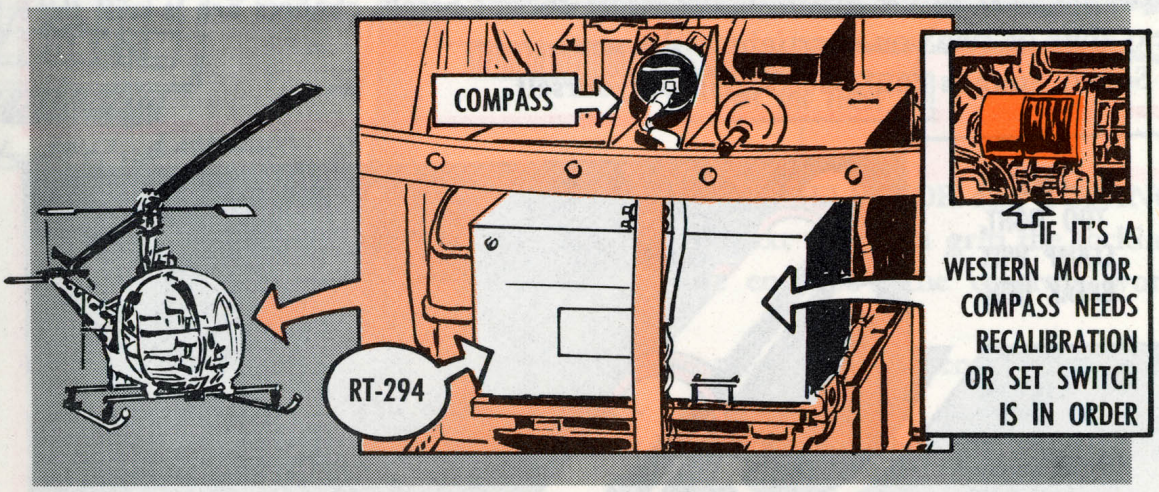

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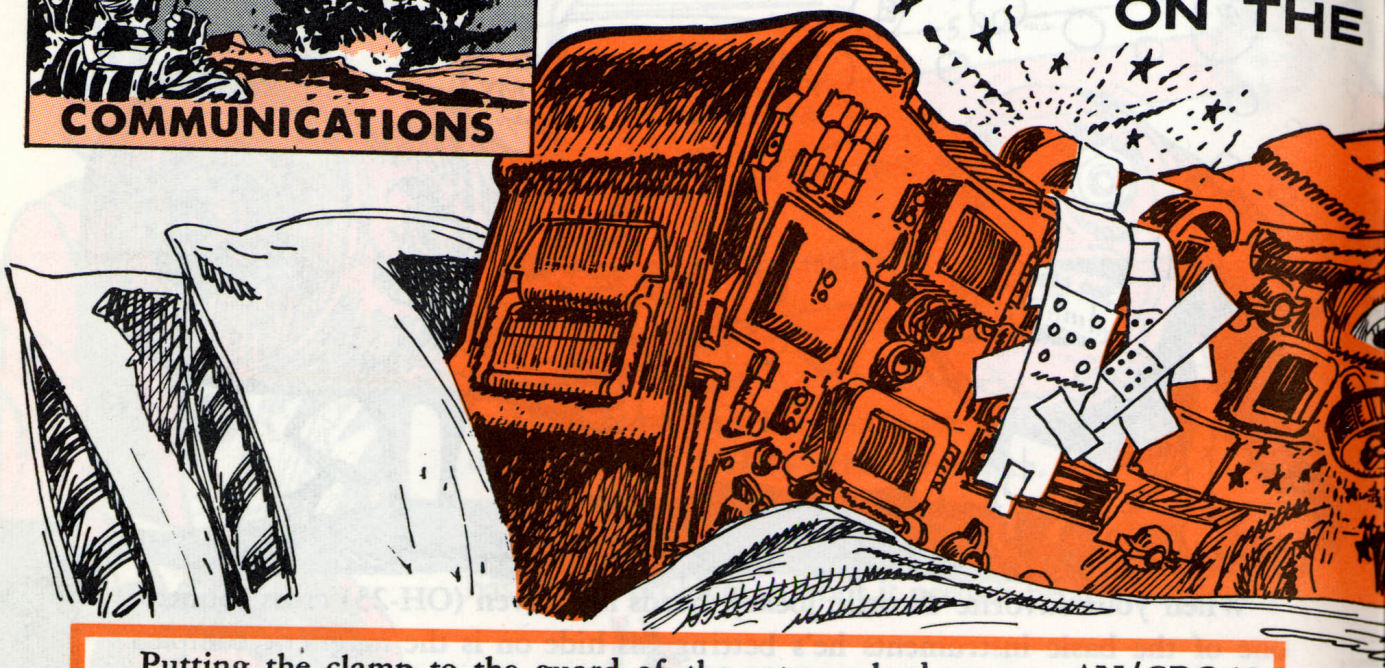
CLAMPING ON THE



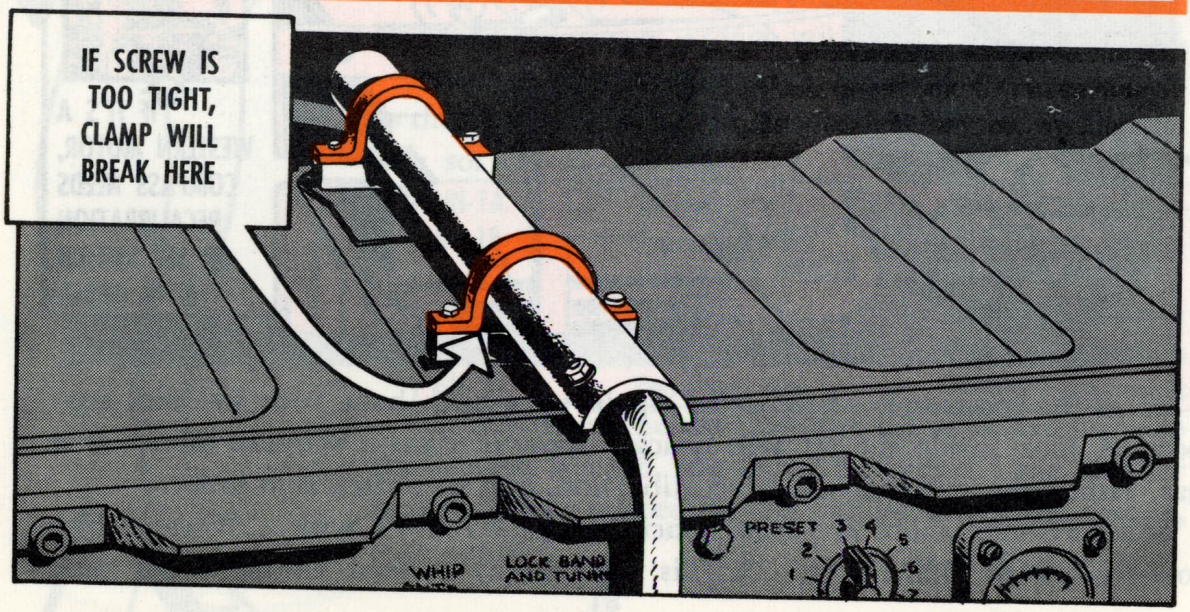
Putting the clamp to the guard of the antenna lead on your AN/GRC-19 radio set can be a gripping experience.

Or . . . it can break you all up. Rather, if you like, you can break your clamp all up.

The guard just has to be snugged to give the antenna lead the protection it needs. It kinda' gives it a good grip on things.

If you put the pressure to the clamp screws, the clamp's just as likely to break off next to the guard as not. If it doesn't break, chances are it will the next time or two you overtighten the screws.

So-o-o, snug is enuf. Get a grip on yourself.



CLAMPING DOWN ON THE ANGRY-19

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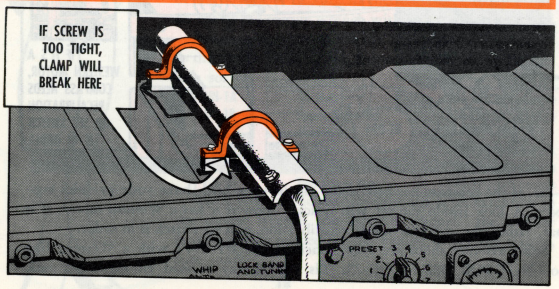
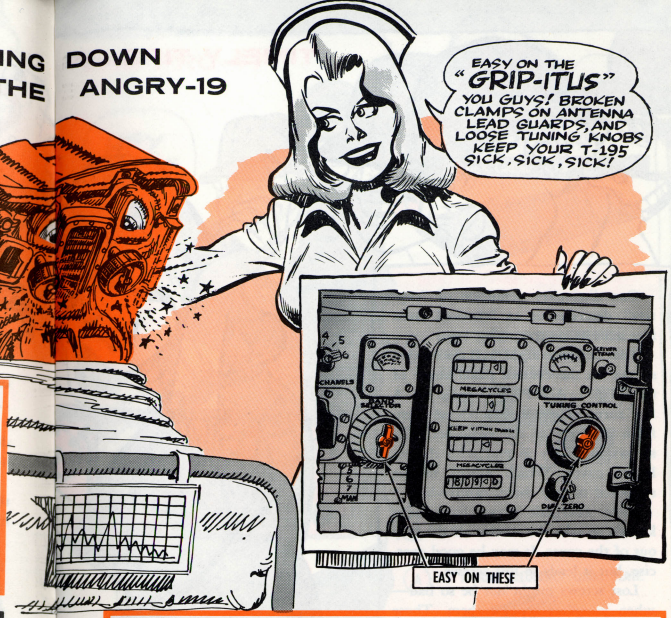




'Nother gripping situation concerns the BAND SELECTOR and TUNING CONTROL knobs of the T-195 transmitter. Next time you grip the locking nuts with your lily whites, back 'em off just enuf so's the controls work freely.

If you back 'em off too much, their screws won't catch when you try to re-lock the controls . . . among other things.

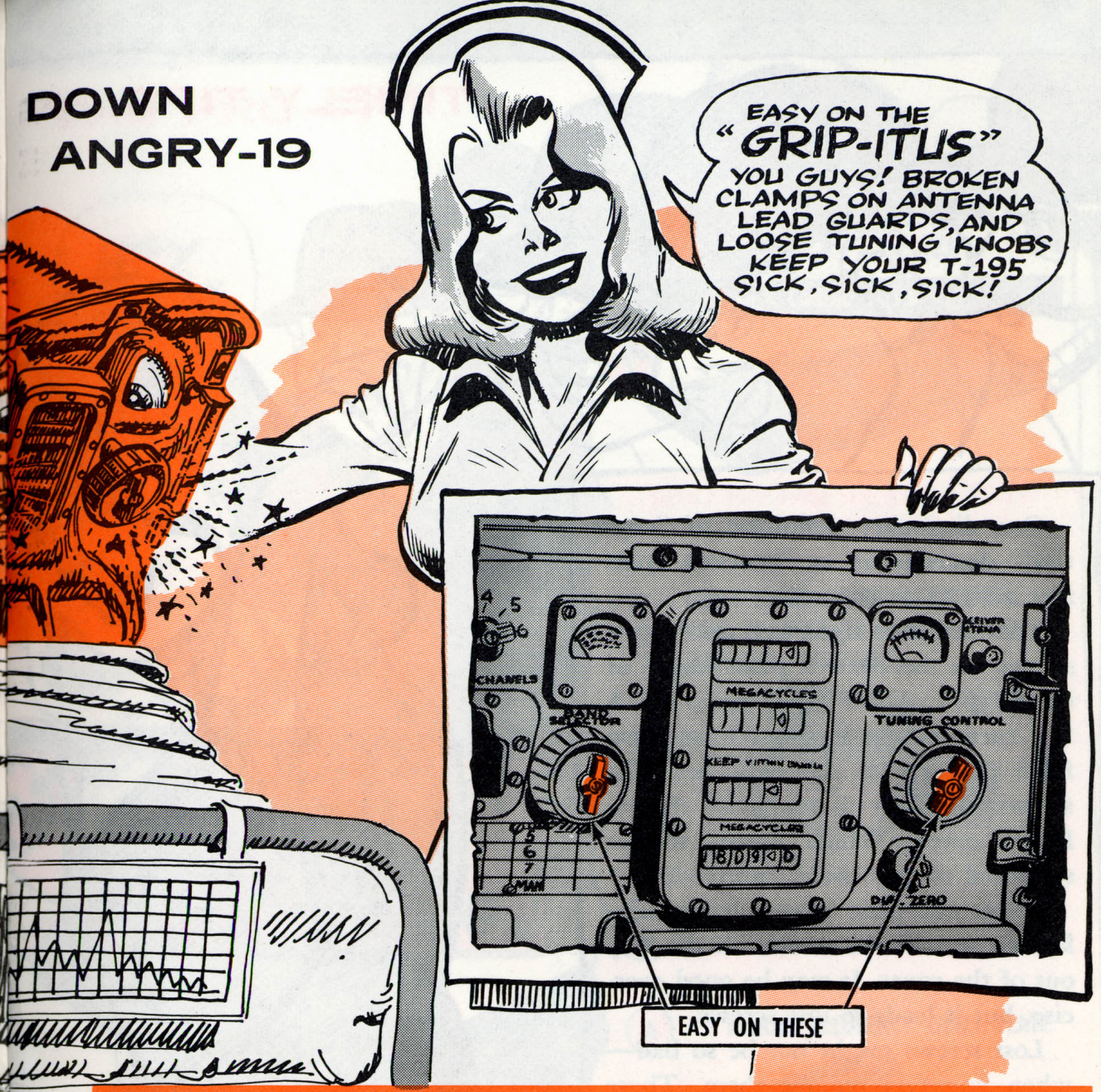
In the other direction, be sure you lock both controls when you're about to use your preset channels.

First, lock the two controls. THEN, turn your PRESET switch to the channel you want.

Fact is, you can save your set a trip to general support by not turning the set on until you've locked the controls and selected your preset channel.

How'sat grip you?

DOWN ANGRY-19



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TIMELY TIPS ON THE PRC-47

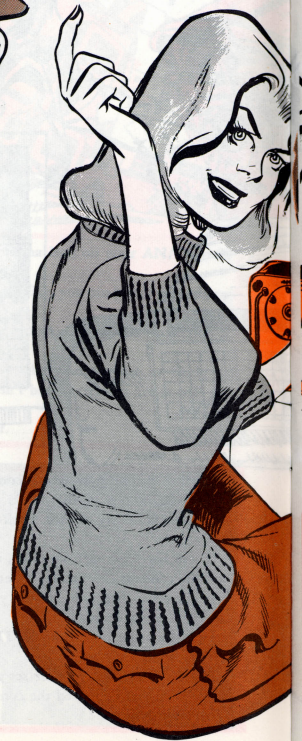
One dictionary definition of "captive" describes it as "checked from free activity or course."

That describes right well the captive screws on the control panel cover of the RT-671, AN/PRC-47 radio set. A few turns of the screws release them from the case of the radio set. The screws then stay in and with the released cover. Which means they're supposed to stay there, captive-like.

Some energetic types have been known to take the screws all the way out of the cover. It may be good exercise, but it leads to lost screws.

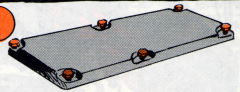
Lost screws might not be so bad—when you can replace them. Those cover screws (you guessed it?) are slightly odd-ball. Like, you can't requisition new ones. You've gotta ask your support to come up with replacements—somehow, somewhere, some way. They won't vote you a popularity ribbon for that.

TM 11-5820-509-12P (30 Sep 63) gets you up-to-date on parts.



CONNIE'S CANDID COMMENTS.

1



DON'T TAKE THESE SCREWS OUT! JUST LOOSEN SO COVER COMES OFF RT-671 . . . AND THAT'S THAT.

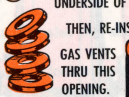
2 DON'T STOMP ON THE LIGHT METAL CASE . . . YOU COULD GIVE IT AN ELECTRONIC BELLYACHE.

3 HERE'S A GAS-VENTING TIP, THAT'LL KEEP YOUR CASE FROM POPPIN';TO VENT GAS THAT BUILDS UP IN YOUR RT-671, DO THIS . . .

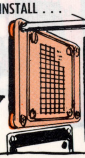
A REMOVE FREQUENCY CHART PLATE.

B PUT A WASHER ON EACH END OF THE UNDERSIDE OF PLATE.

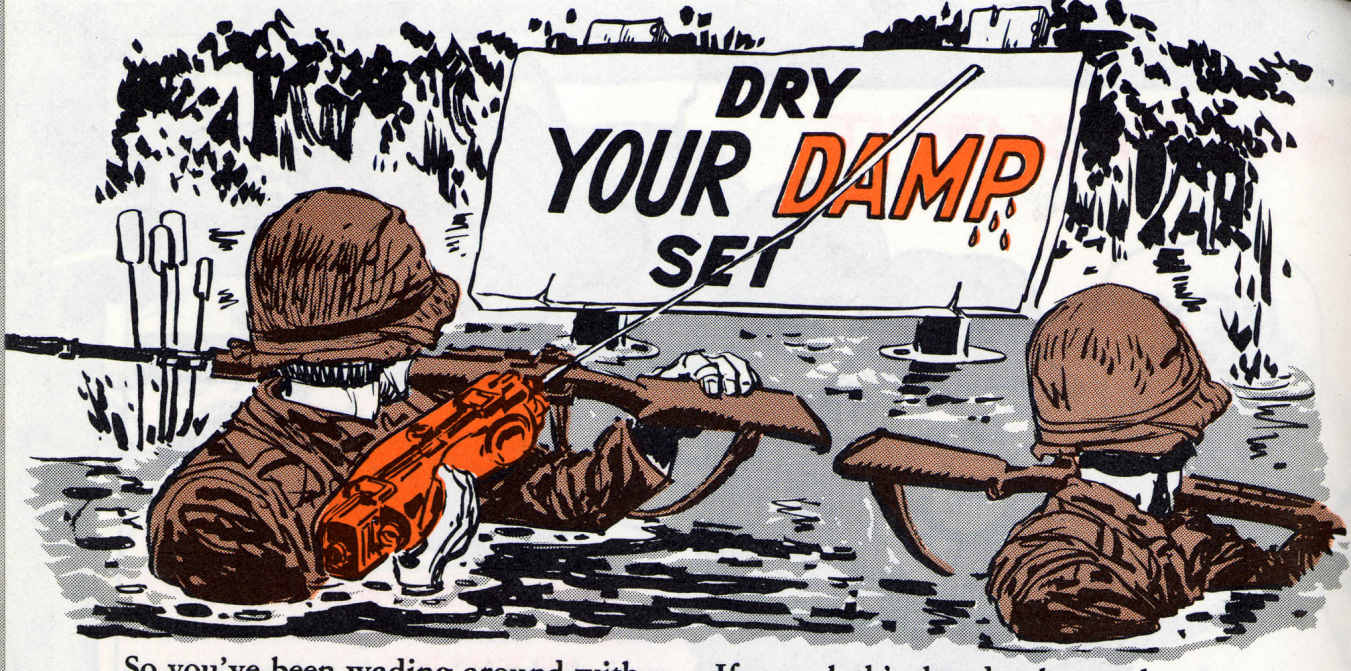
THEN, RE-INSTALL . . .



GAS VENTS THRU THIS OPENING.



WATCH IT WHEN YOU'RE AROUND A MOISTURE SOURCE. KEEP IT DRY!



So you've been wading around with your AN/PRC-6 portable radio set during fording operations . . . and maybe the set got wet.

Never take chances. Better open 'er up the first chance you get and take a peek.

If she's damp, wipe the moisture seal with a dry, lint-free cloth. And use that rag like a powder puff on the chassis by gently patting.

After drying the innards you'd better drag the rag over the outside, too—including the antenna.

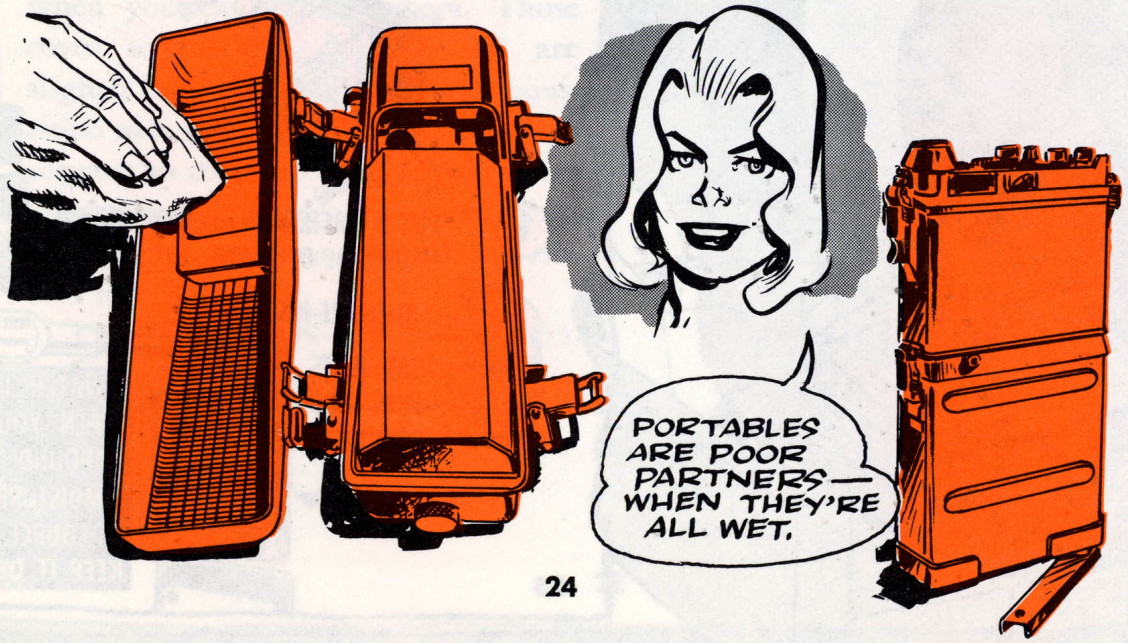
If no cloth's handy, leave the set open and let air dry it whenever possible.

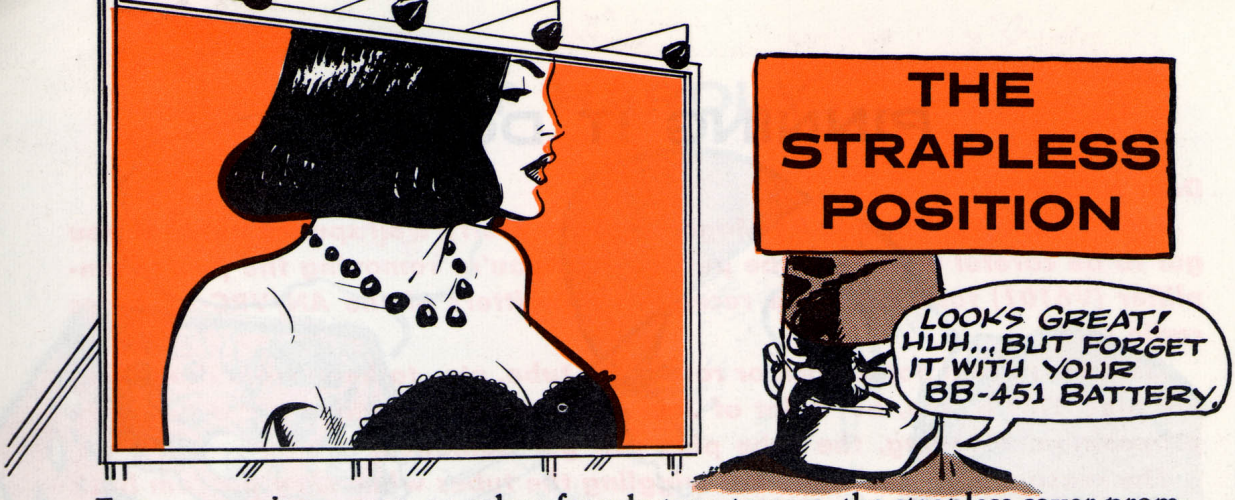
Before crossing that stream, swamp, lake or boondocks mudhole, remember to shut off the air valve. Just don't forget to open it before you operate.

It'd be a good idea to glance at the case clamps to make sure they're tight. This helps keep the dewdrops out.

With the AN/PRC-8 thru -10 series, only the outside needs attention.

Dry with a rag—or let air do the job.

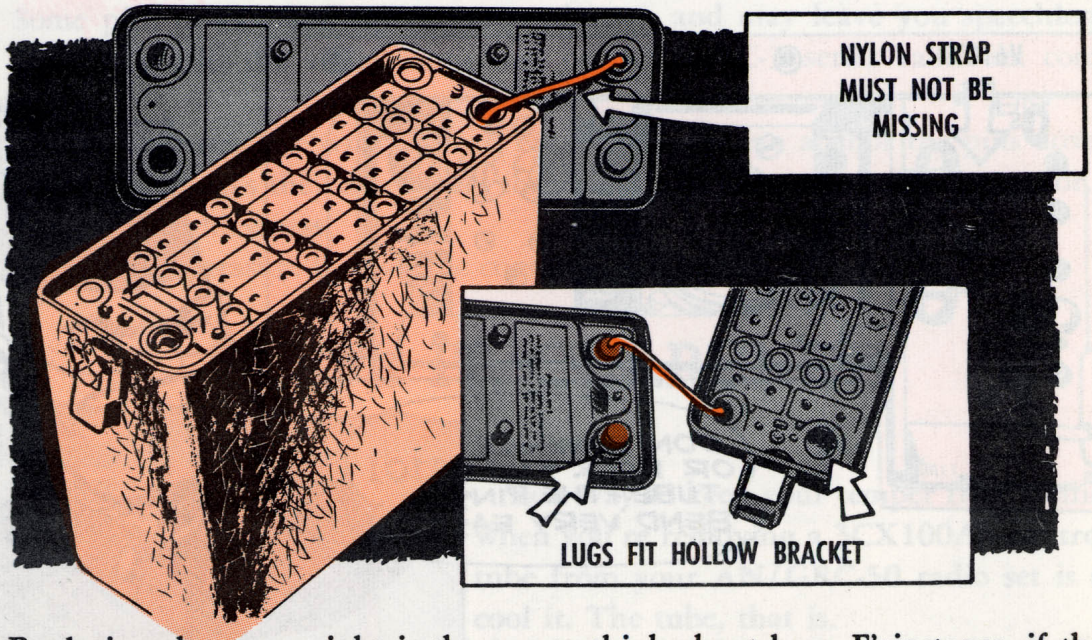




For an evening gown or other female-type teasers, the strapless cover promises all kinds of delights.

For your BB-451 battery used with the AN/PRC-41, -47 radio sets, the strapless cover promises all kinds of problems.

To elaborate: that nylon retaining strap on the battery serves a number of purposes, like making sure the cover doesn't get lost ... or making positive it goes back on only one way, and so forth.



Replacing the cover right is the one to think about here. F'rinstance, if the nylon strap's missing, it's possible to position and snap the cover on wrong. Like, those two big lugs can be forced down on the radio cable receptacles and bust up the connecting pins.

That's bad enough, but that same situation also can short out the battery. Ugh!

If the strap's gone from your cover, a quick look can tell you whether you're positioning it right on the battery case. The lugs on the underside of the cover fit into the hollowed metal bracket of the case. The cover side featuring the two openings goes over the receptacle side of the case.

PINNING IT DOWN

Dear Half-Mast,

TM 11-5820-401-20 and PS Magazine have pretty well spelled out that you got to be careful with the tube puller when you're removing the power amplifier (V6101) tube from the receiver-transmitters of the AN/VRC-12 series radio sets.

Like, we're told not to rock or rotate the tube, etc., to keep from damaging the pins. This is fine, but a lot of Joes don't seem to realize it's a two-way proposition. Meaning, the tube pins still get damaged.

The reason: Unit mechanics are wiggling the tubes when they put 'em back in! As you know, those pins bend mighty easy—and the tubes have to go in as straight as they're supposed to come out. Otherwise, pfffft!

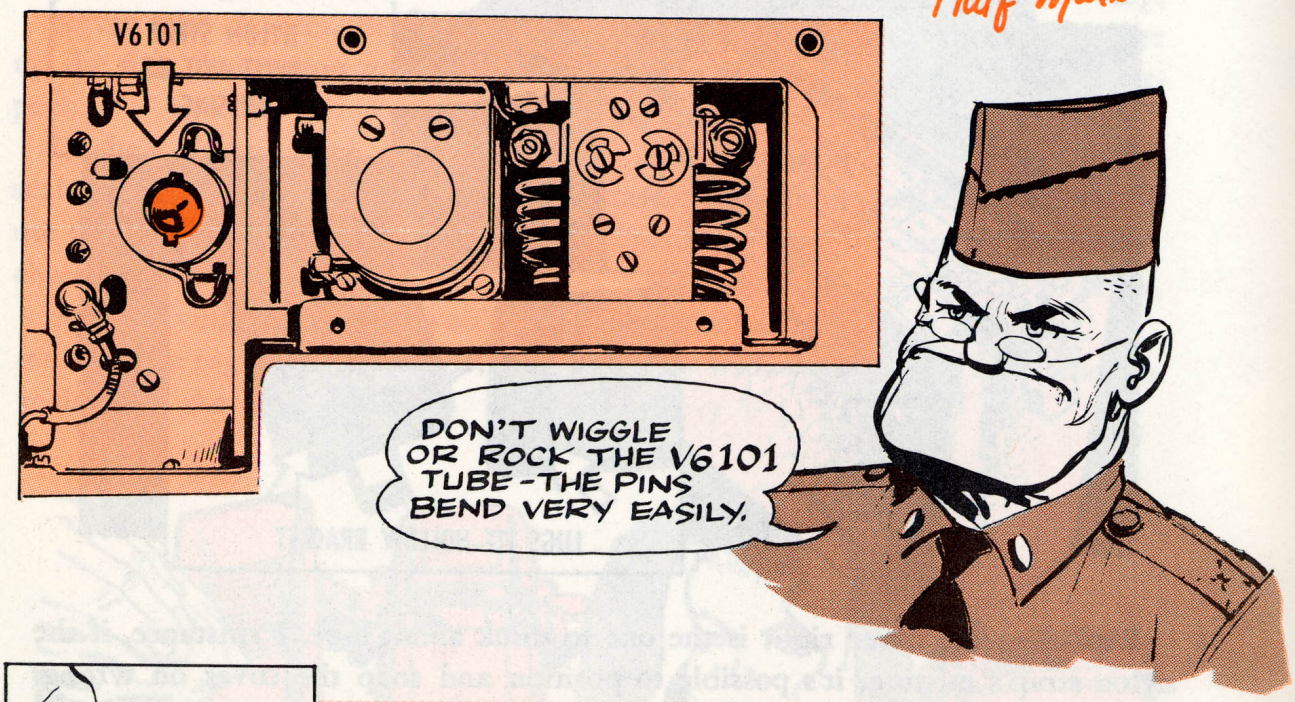
Maybe you can drop a reminder in PS.

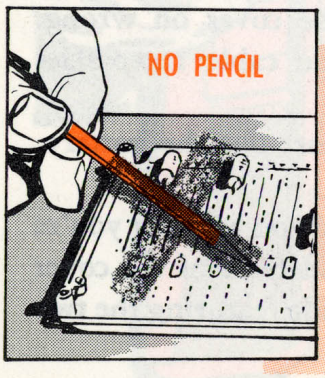
SP 5 E. A. M.

Dear Specialist E. A. M.,

You did the talking. I'm along for the ride on this one, and I hope your point sinks in.

Half-Mast



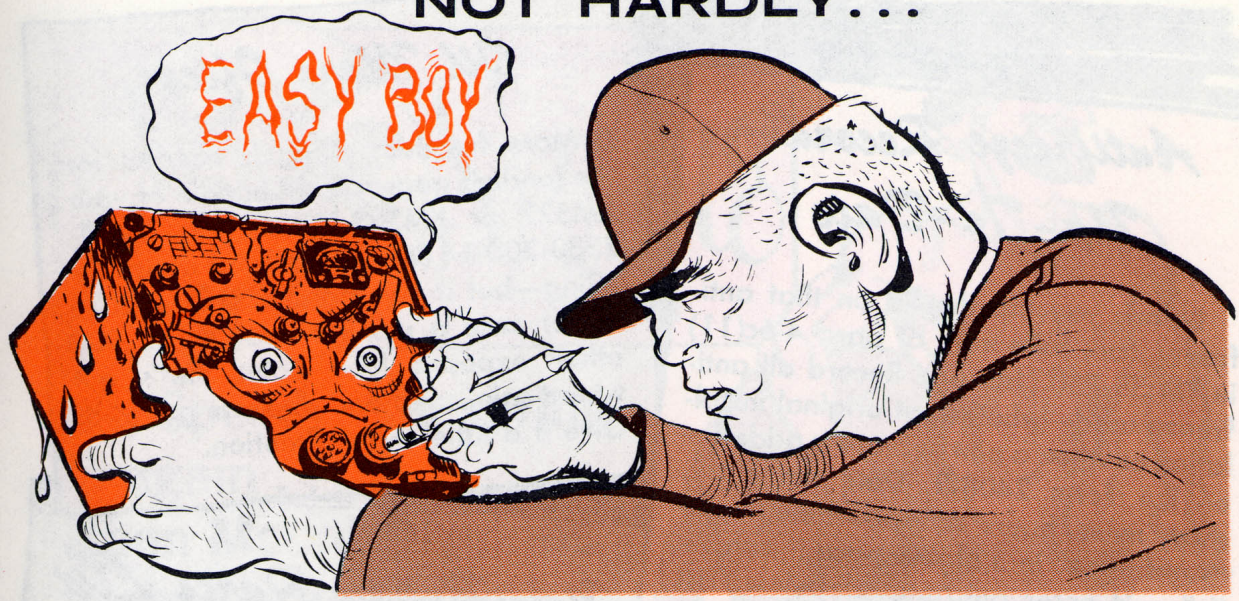


GET THE POINT?

When you're tracing or otherwise checking circuitry—especially printed circuits—put your pencil in your pocket.

Like, don't mark those circuits wtih a pencil, man. Just a trace of graphite creates another circuit . . . and a current leak.

NOT HARDLY...



Not too hard, please, when you're usin' your mitt to get the grit from the contact pins.

Some pins don't stand up to the strain . . . and may leave you speechless.

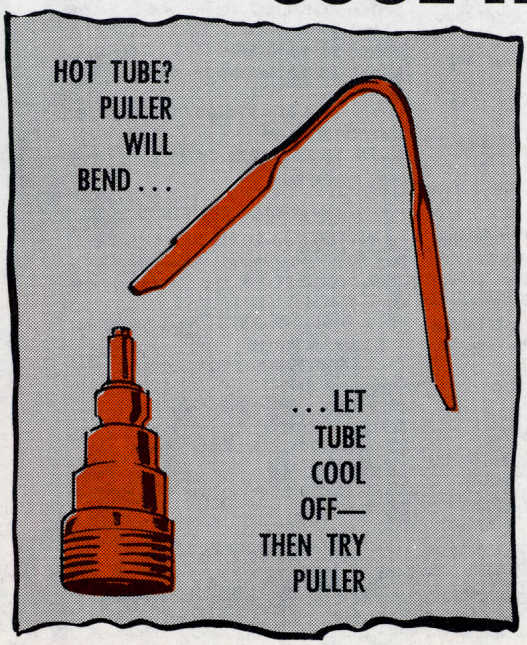
Good examples are audio connectors on AN/GRC-3 series radio set components.

Too much push, like with a pencil eraser or such, can anchor the pins down just far enough so's they don't meet the contacts of the audio cable connector.

Result: speechlessness.

Just a little pressure'll clean the contacts. Not hardly . . . .

COOL IT, CLARENCE



Best way to keep your temper from boilin' when you're removing a 3CX100A5 electron tube from your AN/GRC-50 radio set is to cool it. The tube, that is.

Tube extractor, FSN 5120-293-0808, just doesn't have the beef to remove hot 3CX100-A5 tubes. Fact is, the ends of the tube puller bend . . . and even break. Mostly, the tube stays where it is.

The tube puller's supposed to be improved, but until it is, treat it careful-like. A cooled-down tube and some patience should help the puller do its job.

Antifreeze Record—Up-To-Date

Before you flip the lid on that antifreeze can, take note of para 4-6c(11) in TM 38-750 (Jan 64). Record all antifreeze used—whether at original installation or when a pint or more is added—on DA Form 2408-2. Date the entry, show miles/hours as applicable, write "Antifreeze" in a blank space in column "c" and enter quarts used below. List cooling system protection in degrees (F) in column "f," and sign the entry in column "g." (If your equipment has no DA 2408-2, you can make similar entries on DA Form 2409.)

Oil More Often

More frequent oiling is needed for the landing gear ratchet handle of your XM527 or XM539 semitrailer. LO 9-2330-300-14 (Jun 63) calls for quarterly oiling—but it can stand a shot of lube about once a month. Treat it like any other exposed lube point that's out where rain, sand and dust can get at it: Give it a little extra attention.

New Repair Parts List

Get 'em right and get 'em faster—your tank and automotive repair parts, that is. Use the latest authorized stockage list, TM 9-2300-223-20P (Oct 64).

A selected list of recent publications of interest to Organizational Maintenance Personnel. This is a list compiled from recent Adjutant General's Distribution Center Bulletins. For complete details see DA Pam 310-4 with latest changes.

TECHNICAL MANUALS

TM 1-1U-1A-1039, C2, Oct, U-1A.
TM 3-1040-219-12, Nov, Service Unit, Flame Thrower, Truck-Mtd, M4A2.
TM 3-4240-240-12, & -25P, Oct, Heater, Air, Elec. Filter Unit, M3.
TM 5-3805-214-20P, Sep, Loader, Scoop, Hough H-30M.
TM 5-4520-202-25P, Sep, Heater, Water: Oil Fired, 3,000 GPH (York-Shipley Mdl EW-3000) (S. T. Johnson Mdl STJ-D8259).
TM 5-5420-290-20P, Oct, Launcher, Unit Rig AVL48A2.
TM 9-1410-250-12P/1/1, Oct, Nike-Herc, Nike-Herc (Imp), Ammo (Other than Atomic Wpns).
TM 9-1430-268-12P/1, Oct, Nike-Herc, Nike-Herc (Imp), Ground Con Equip.
TM 9-1430-376-12P/2, Oct, Pershing, Ground Hdlg. Spt & Svc Equip.
TM 9-1440-250-12P/6/1, Nov, Nike-Herc, Nike-Herc (Imp), Ground Hdlg, Spt & Svc Equip.
TM 9-1450-375-12P/2, Oct, Pershing, Ground Hdlg, Spt Svc Equip.
TM 9-4935-253-12P/2/2 Oct, Nike-Herc, Nike-Herc (Imp), Test Equip (Ord).
TM 10-275, Oct, Cold Weather Clothing and Sleeping Equip.
TM 10-500-53, Oct, Airdrop—Rigging Ammo for Low and High Velocity Drop.
TM 11-5805-202-25P, Oct, Telephone Central AN/MTC-3.
TM 11-5805-235-20P, Nov, Repeater, Telegraph TH-35/FG.
TM 11-5840-211-20P, Nov, AN/PPS-4 Radar Set.
TM 11-6130-246-12 Nov Power Supply PP-1104C/G.
TM 11-6625-398-25P, Oct, OV-1 and U-8
TM 11-6625-472-12, Oct, R. F. Signal Generator Set AN/URM-26B.
TM 55-1100-204-15-4, Oct, CH-21.
TM 55-1100-204-15-5, Oct, CH-34.
TM 55-1100-220-12-2, C1, Oct, Wpns System, OP/ORG Maint, Corporal.
TM 55-1100-226-12-1, C1, Oct, Wpns System, OP/ORG Maint, UFD XM41.
TM 55-1400-375-10-5, -6, -8, -10, -14 &-17, Nov, Pershing, TM Ground Handling, Spt & Svc Equip.
TM 55-1510-203-20P, Sep, U-6.

LUBRICATION ORDERS

LO 3-1040-219-12, Nov, Service Unit, Flame Thrower, Truck-Mtd, M4A2.
LO 3-1040-224-12, Oct, Compressor, Recip, Power Driven Flame Thrower, 3-½ CFM AN-M4 (Stewart-Warner Mdl 3260101-4).
LO 9-1055-208-10, Oct, Honest John, Ground Hdlg, Spt & Svc Equip.
LO 9-1440-301-12, Oct, Sergeant, Ground Hdlg, Spt & Svc Equip.

MODIFICATION WORK ORDERS

MWO 9-1100-225-20/2, Oct, Wpns System, OP/ORG Maint, ADC XM55 (TADM).
MWO 9-1100-227-20/1, Sep, Wpns System, OP/ORG Maint, ADC XM55 (TADM).
MWO 55-1510-203-34/1, Oct, U-6.
MWO 55-1510-204-34/42, Oct, OV-1.
MWO 55-1520-210-20/3, & -20/8, Nov, UH-1.
MWO 55-1520-211-20/4, -20/18 & -34/11, Nov, UH-1.

TECHNICAL BULLETINS

TB 9-1100-250-20/1, Sep, Wpns System, OP/ORG Maint, Nike-Herc.
TB 9-1400-324-10, Oct, Sergeant, Msl Oper & Maint.
TB 9-1400-375-25/1, Nov, Pershing, Msl Oper & Maint.
TB 9-1400-399-10, Oct, Pershing, Msl Oper & Maint.
TB 9-1400-549-10/1, Oct, Hawk, Msl Oper & Maint.
TB 55-1510-203-34/2, -34-/3 & -34/4, Oct, U-6.
TB 55-1900-202-12/1, Oct, Floating Craft PM.

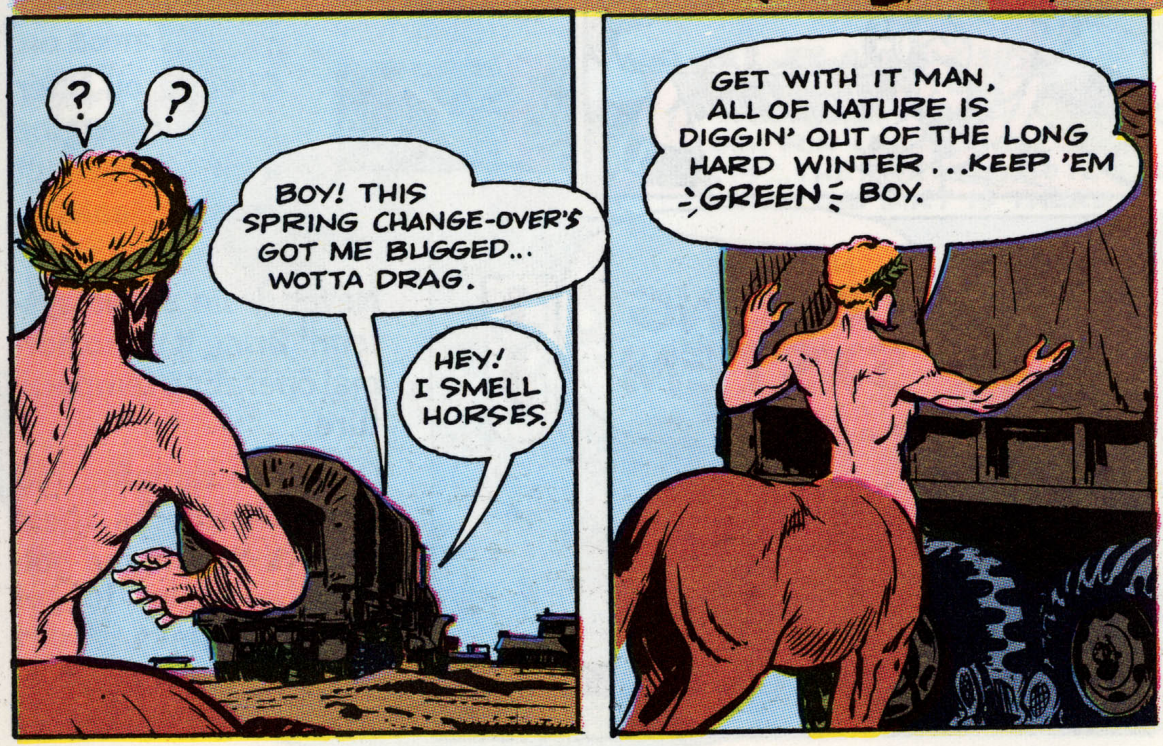
MISCELLANEOUS

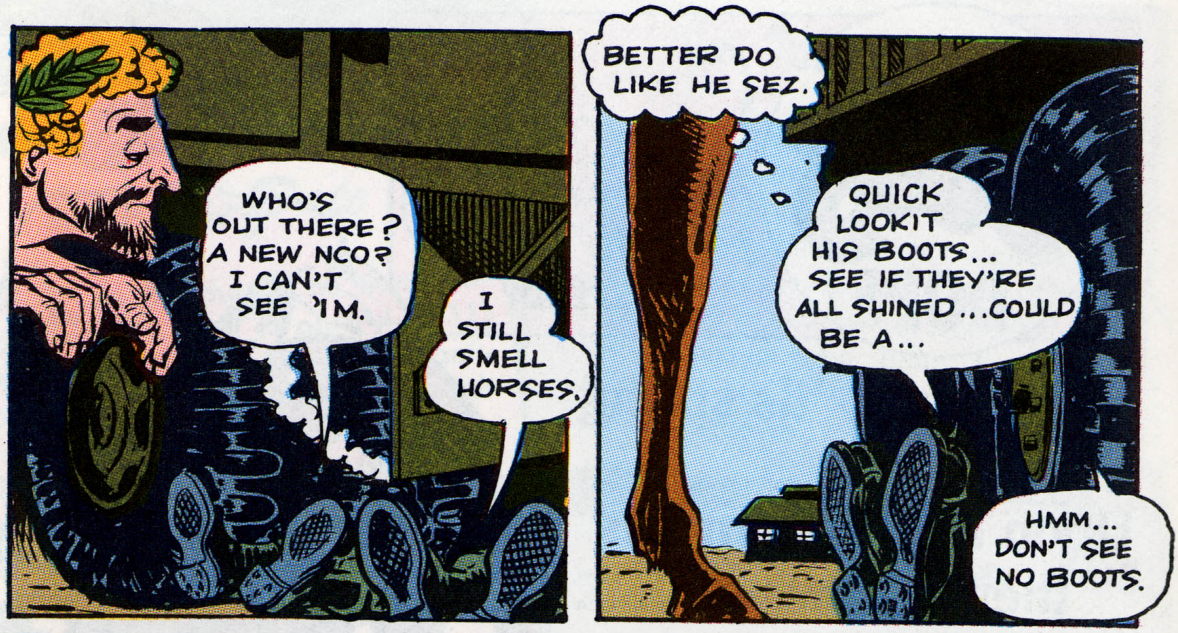
Approach, Dec.
FM 23-67, Oct, 7.62-mm Machine Gun, M60.

JOE'S DOPE

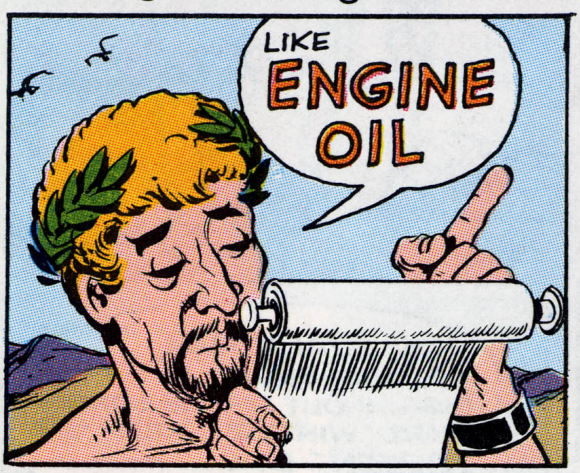
Spring TO IT, SPEEDY

Ah, Speedy, 'tis spring again . . .
Upon Mount Olympus they are swingin'. . .
Apollo is tooling his wheel . . .
And I am come among the mortals
To herald the vernal equinox.





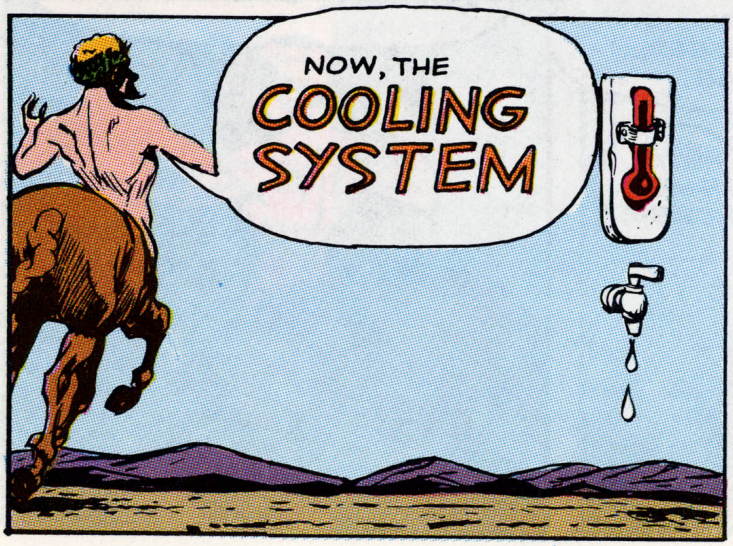
This includes all your equipment . . . tanks, trucks, dozers, generators, aircraft, compressors, pumps, MHE's, tractors, etc. . . . their winter grime must go down the drain–



Bring engine up to operating temp before y' drain 'er.

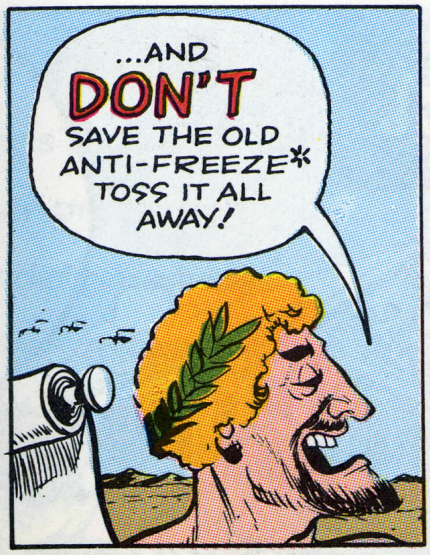
Put in the correct new oil (per the LO)

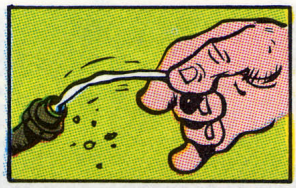
Change oil filter and run engine a bit to checkout possible leaks.

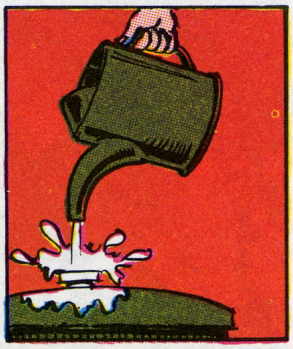


Never drain a cold system!! Bring it up to normal operating temperature.

Open the radiator and engine petcocks (best remove the engine petcock . . . easier to get the big chunks of dirt out).







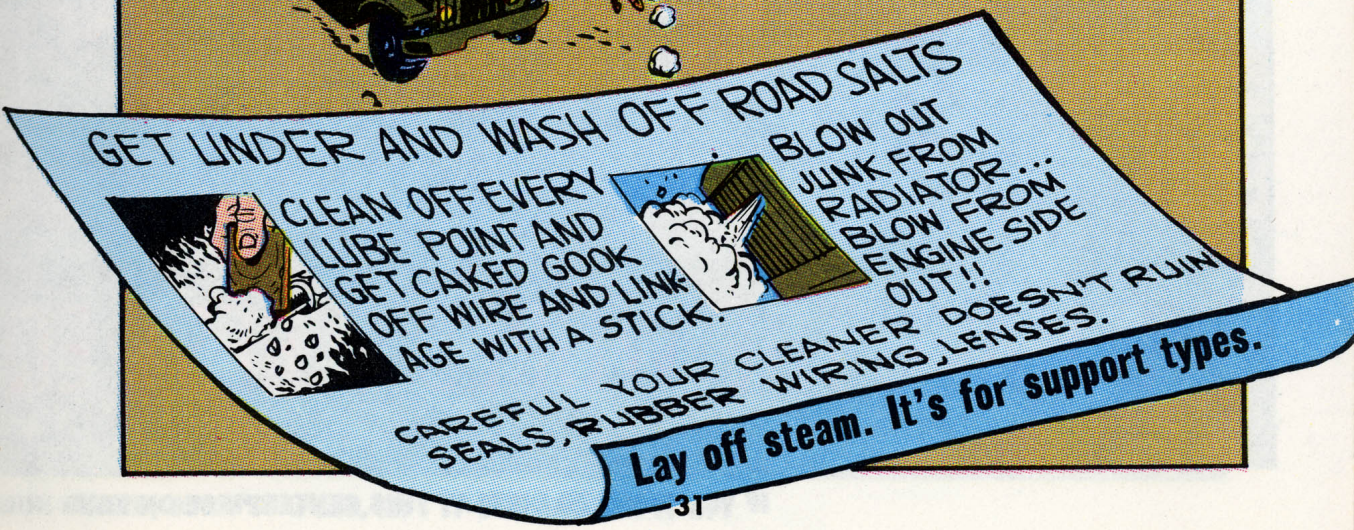
Now, use a piece of soft wire to poke open a stuck petcock or on the overflow tube.

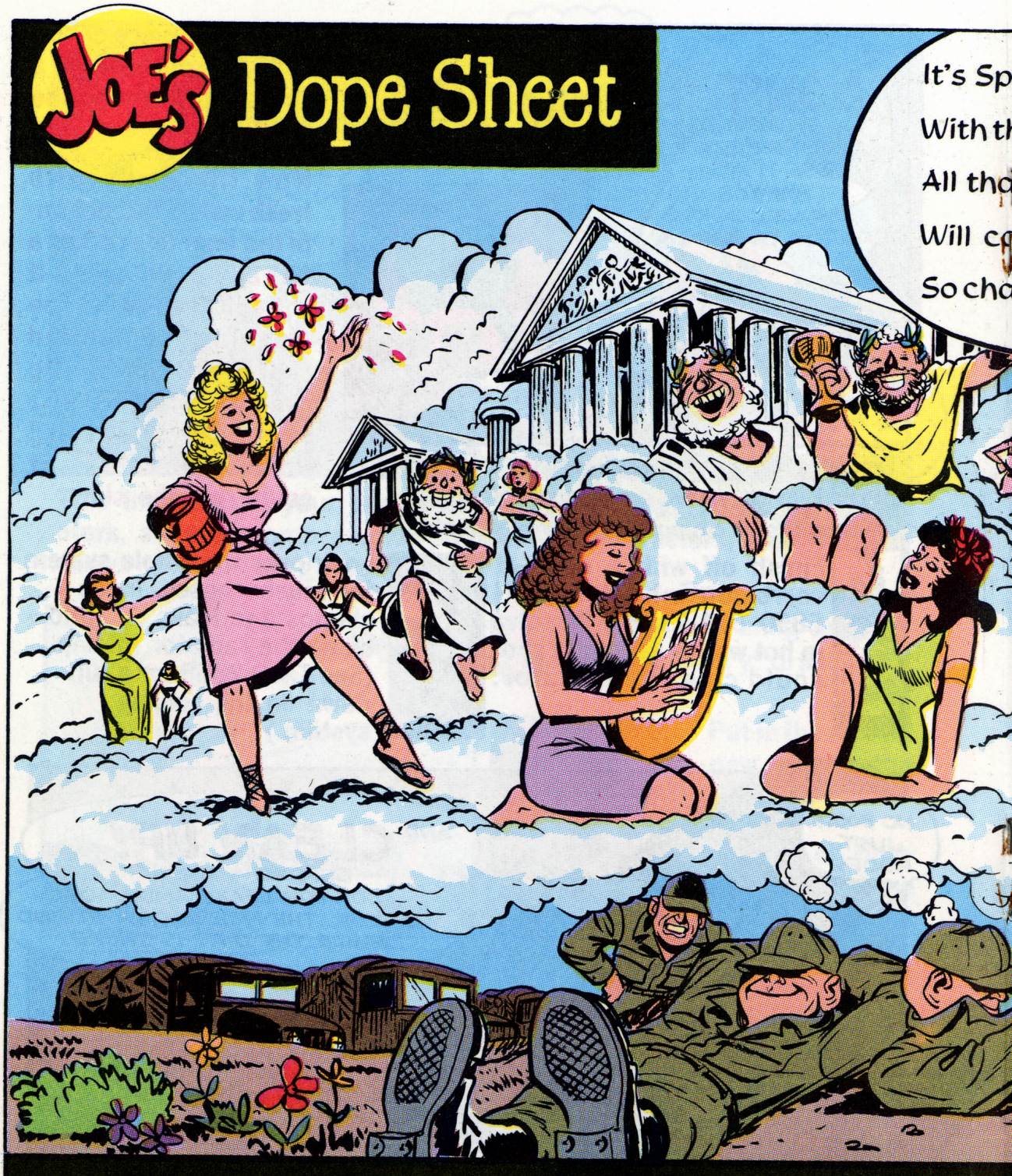
Now fill 'er up with fresh water (but not until the engine's cooled a bit) and drain again! If she still needs work use cleaning compound (6850-690-5561). Do exactly as TB ORD 651 says — no short cuts!! Handle with care . . . it could ruin the skin.

*Exception: "Combat ready" vehicles don't get drained unless you've got enough antifreeze on hand to give 'em protection for next winter.

Finish off with a dose of corrosion inhibitor (FSN 6850-664-7123). Dissolve in hot water—straight shot could clog the radiator.

Look over the whole system for mushy hoses, loose clamps and leaks . . . and clean the radiator fill cap. (See TM 9-2858 for a run-down on the cooling system.)

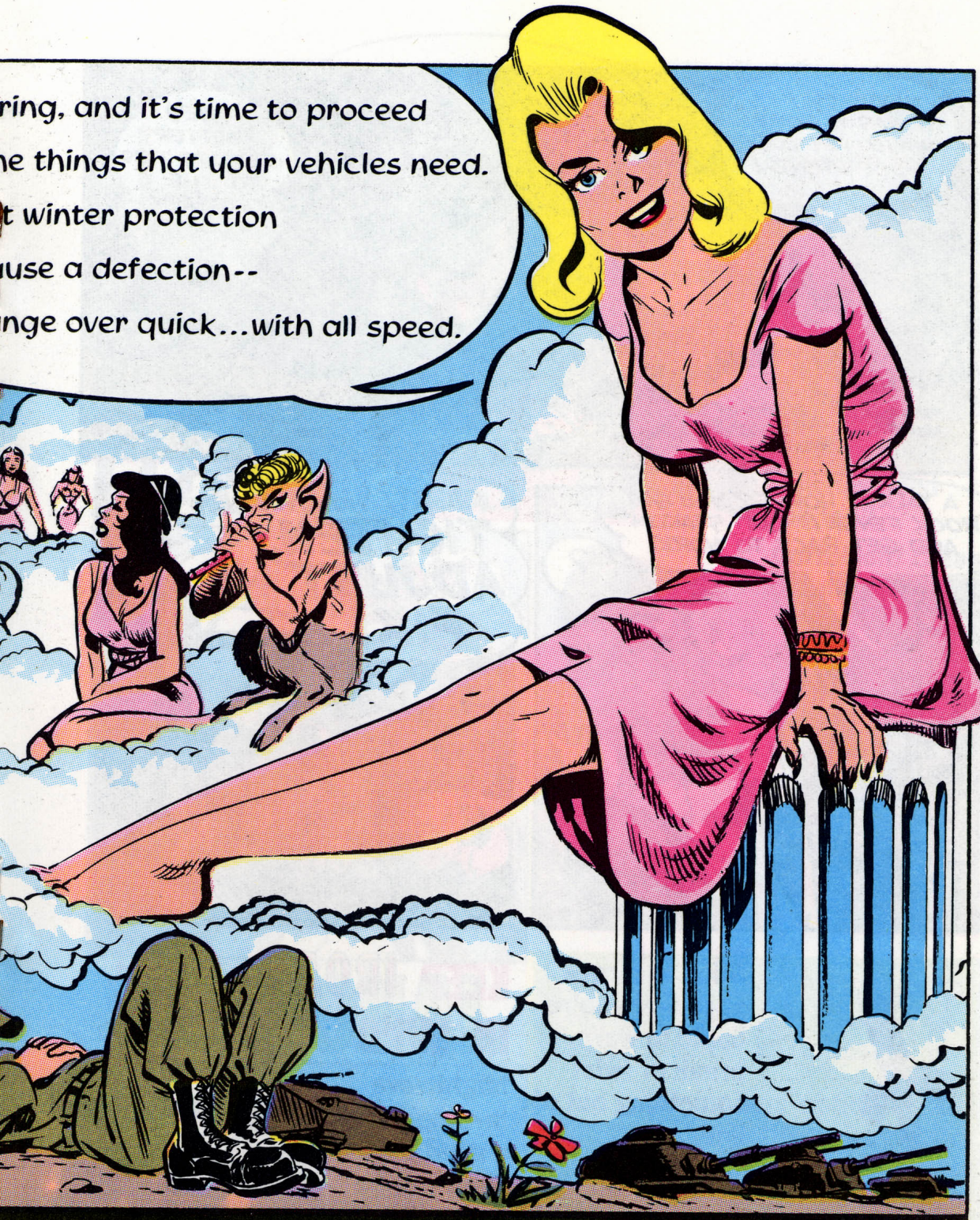




WE HAVE THE WORLD'S BEST EQ

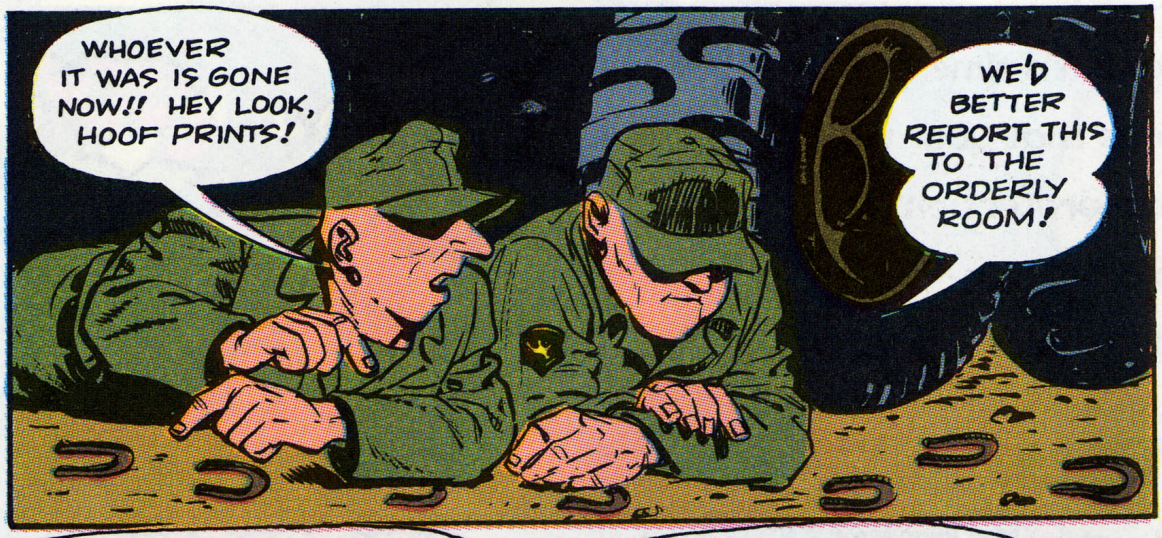
IF YOU WANT TO DISPLAY THIS CENTERPIECE ON YOUR BULL

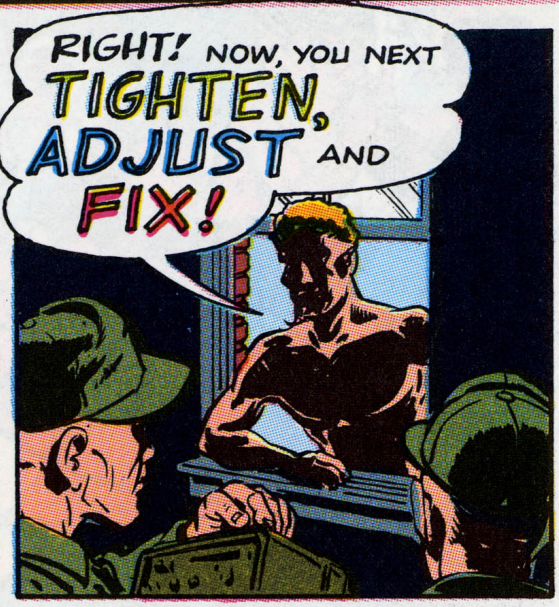
IF YOU WANT TO DISPLAY THIS CENTERPIECE ON YOUR BULLETIN BOARD, OPEN STAPLES, LIFT IT OUT AND PIN IT UP.

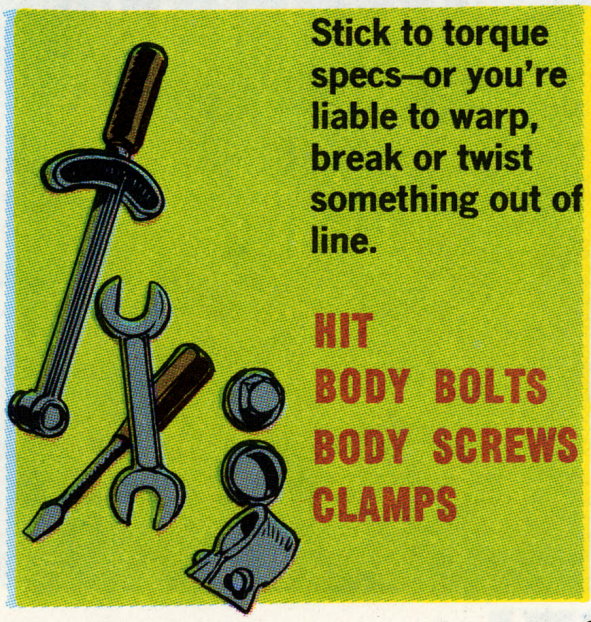


UIPMENT ... *Take care of it*

ETIN BOARD, OPEN STAPLES, LIFT IT OUT AND PIN IT UP.







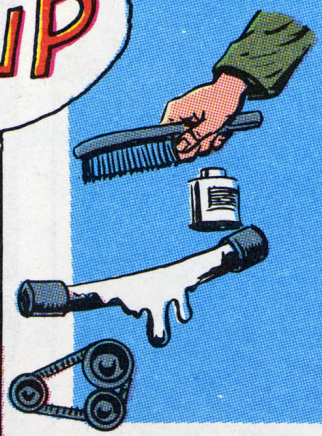
Stick to torque specs—or you're liable to warp, break or twist something out of line.

HIT
BODY BOLTS
BODY SCREWS
CLAMPS

KEEP IROAN IN MIND

Might save throwing away a good part when a little adjusting'll save it.
In doubt?? Call support.

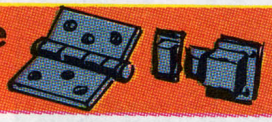
Inspect, Replace Only as Necessary



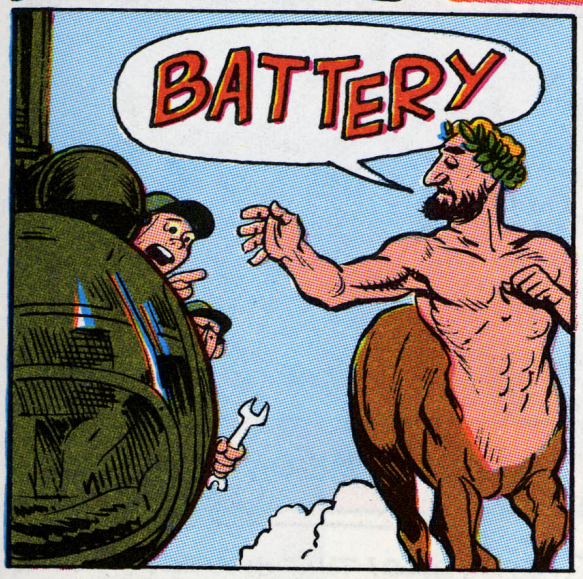
Be sure surface is cleaned right or treated if that's called for. Don't slop paint on rubber, belts or data plates.

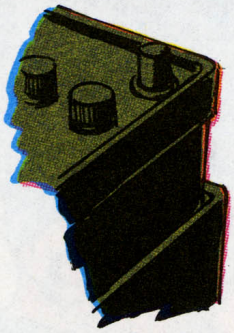
LUBING

follow the LO



Hinges, pins, latches need oil too!!



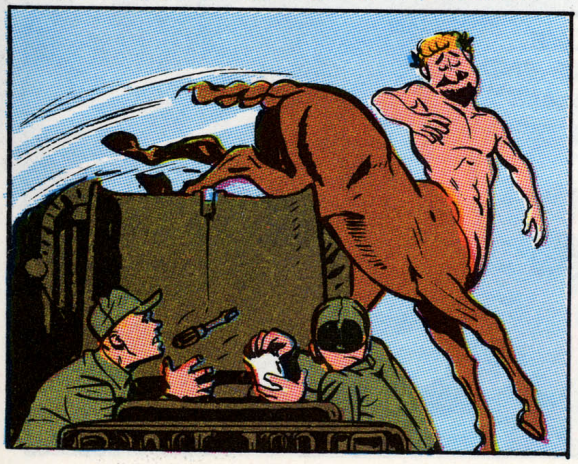


Corrosion? Clean off and wash with baking soda . . . rinse well. Leaks? Cracks? Carrier box OK? Repaint carrier box and tighten.

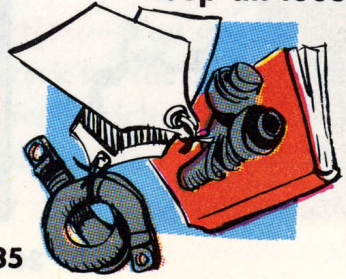
Blow out filler cap vent holes . . . musn't be clogged.

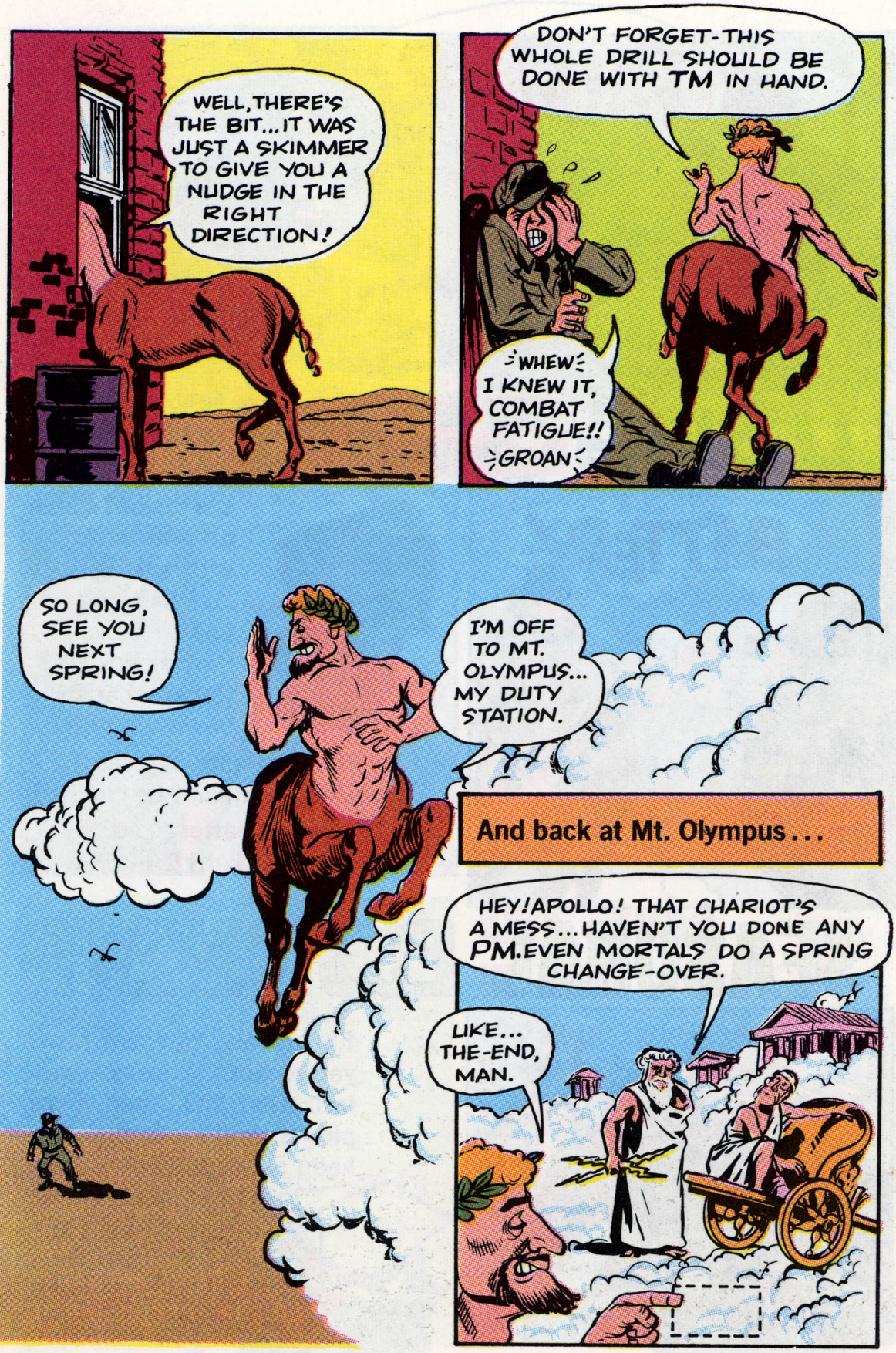
Position battery and make snug . . . light GAA on terminals.

SEASONAL EQUIPMENT



Fix up any special stuff you're putting away—winterization kits, road, snow plows, sanders, scrapers—keep all loose stuff stowed with the equipment... instruction pamphlet too.




WELL, THERE'S THE BIT... IT WAS JUST A SKIMMER TO GIVE YOU A NUDGE IN THE RIGHT DIRECTION!
DON'T FORGET-THIS WHOLE DRILL SHOULD BE DONE WITH TM IN HAND.
WHEW! I KNEW IT, COMBAT FATIGUE!! GROAN!
SO LONG, SEE YOU NEXT SPRING!
I'M OFF TO MT. OLYMPUS... MY DUTY STATION.
And back at Mt. Olympus . . .
HEY! APOLLO! THAT CHARIOT'S A MESS... HAVEN'T YOU DONE ANY PM. EVEN MORTALS DO A SPRING CHANGE-OVER.
LIKE... THE-END, MAN.

YOUR M114 SCOUT ROLLS ON

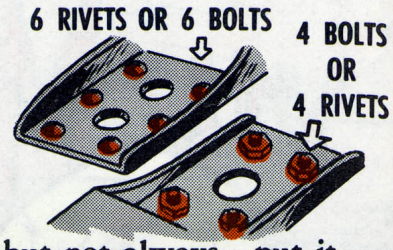
PART II

SUSPENSION KNOW HOW

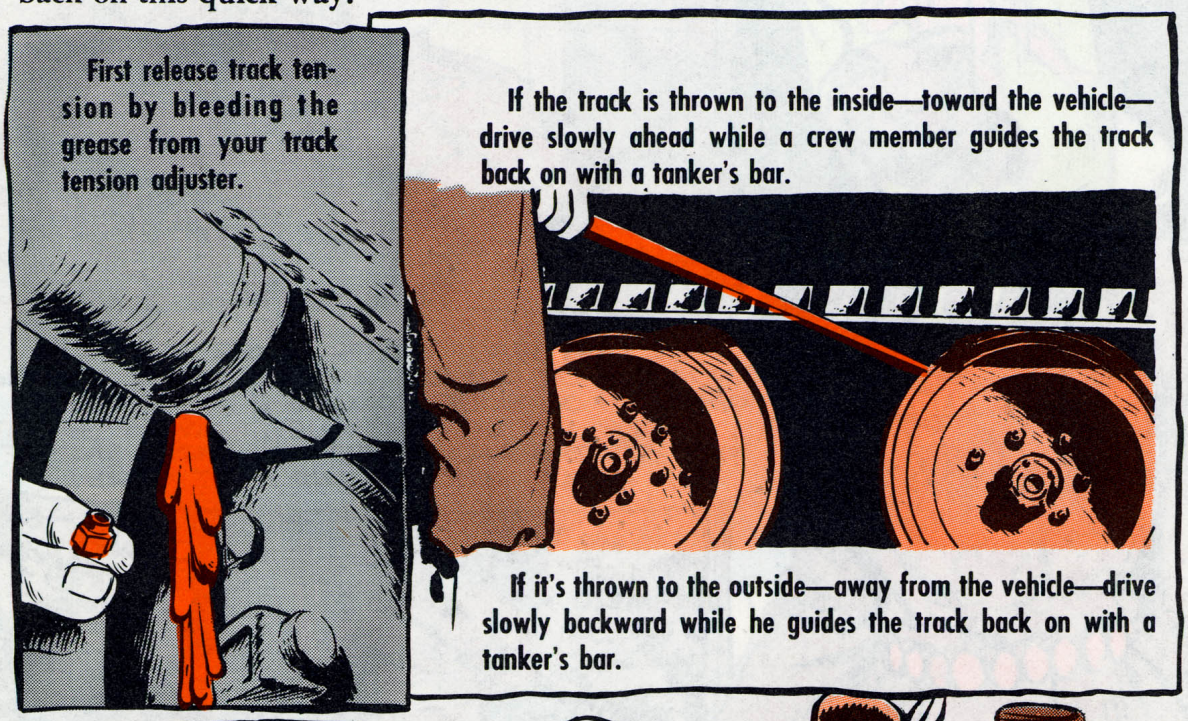
Track Identification—You may not know it but there are two kinds of track for the M114. There's a 3/16-in cable type on earlier vehicles and a 1/4-in cable type on late production models and for replacements. It's easy

PS MORE

to tell 'em apart. The 3/16-in track has six rivets (or bolts) and the 1/4-in track has four rivets (or bolts). Don't count on over 1,000 miles wear from the 3/16-in track. The 1/4-in lasts a longer time and will go well over the 1,000 mile mark.

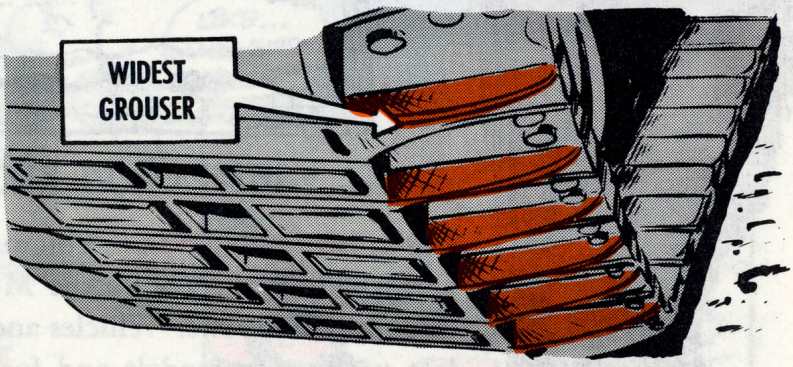


Thrown Track—If you throw a track you can often—but not always—put it back on this quick way.

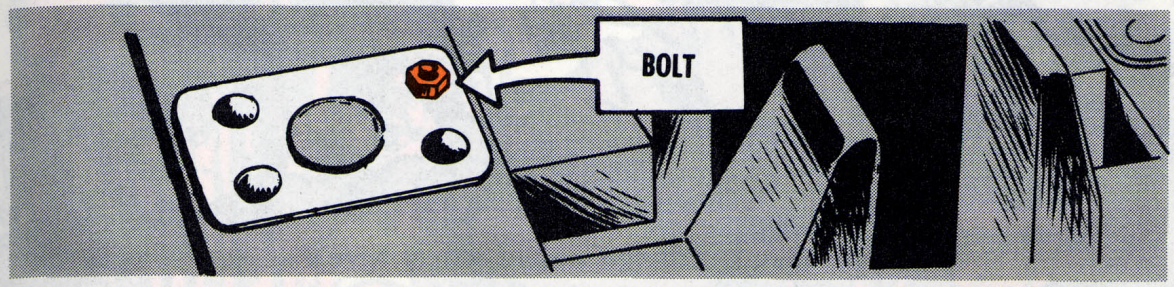


Breaking The Track—If you have to break the track, your TM says you can break it at either the front or the rear. So break it at the rear . . . it's a lot easier that way.

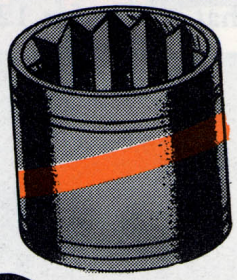
Tracks Backward—It is physically possible to have the track on backward. Your track is on right when the widest grouser of the top track shoes is toward the front.

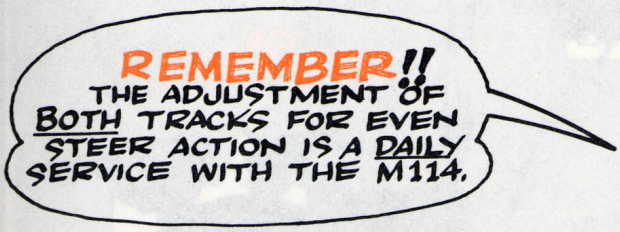


Track Rivets—The track rivets have to be secure. If you find one loose, replace it with a bolt the first chance you get.

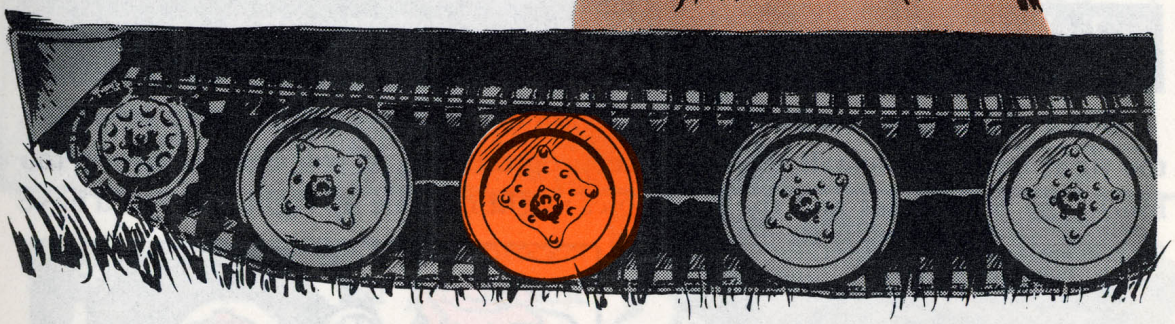


Adjusting Track Tension—Your TM shows you how to measure track tension with a taut string and a rule. You may not have a rule out in the field so measure the sockets in your OEM set and pick out and mark the socket that's nearest to 1⅝-in to 1⅞-in high. Then you can use it with the string instead of a rule.

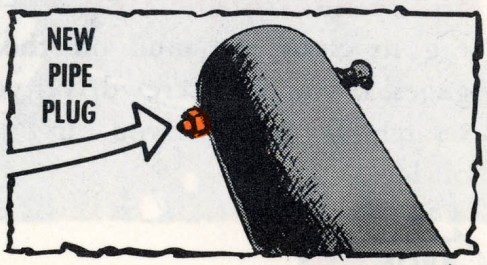




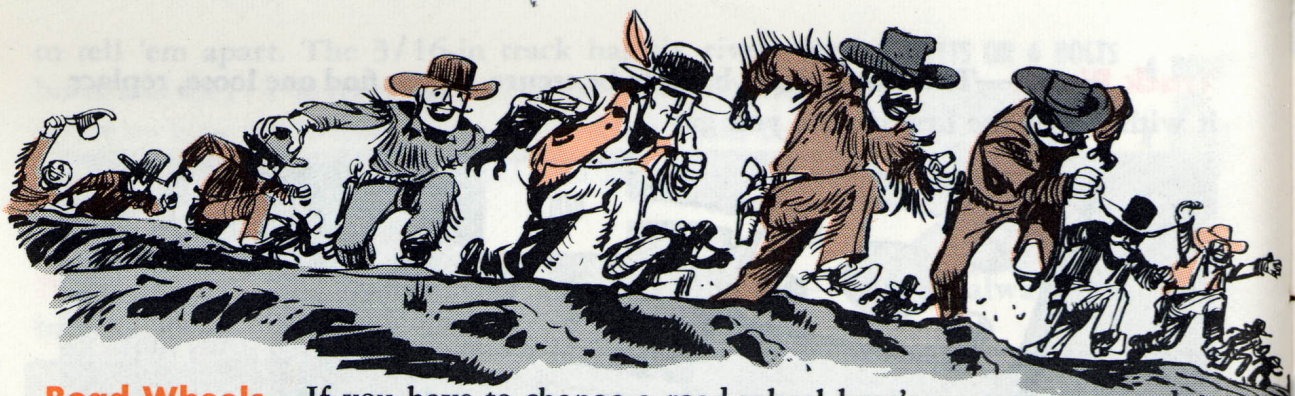
Adjustment Point—When you measure track tension, you do it over the No. 2 road wheel. 'Course you know the No. 2 wheel is the second from the drive sprocket; some outfits stencil an arrow pointing to the place you measure track tension.



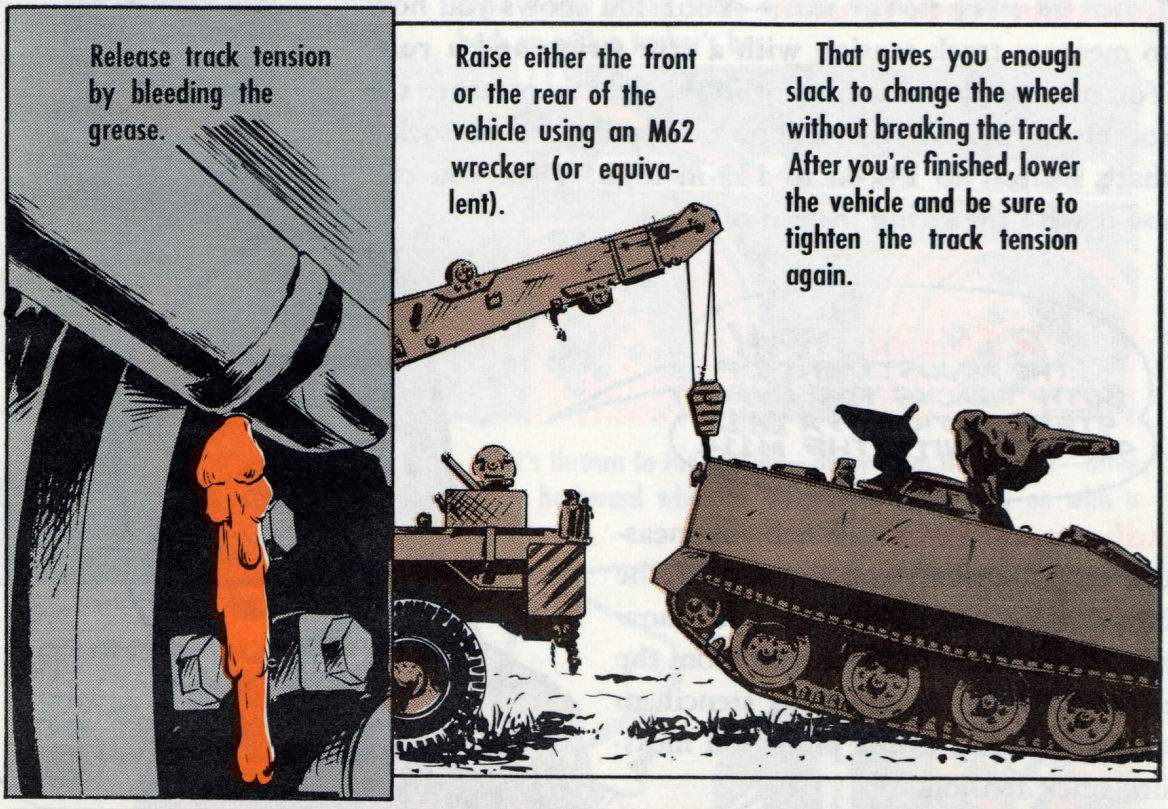
Track Adjuster—On late model M114A1's the lube fitting on the adjuster front bearing has been left off and the relief valve has been replaced by a pipe plug.



PS MORE



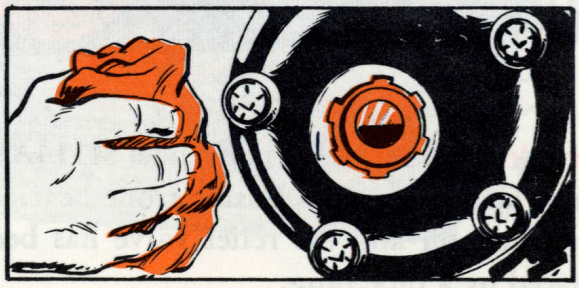
Road Wheels—If you have to change a road wheel here's an easy way to do it that works for 12 out of the 16 road wheels on the vehicle:



The four road wheels you can't use this system on are the front and rear inner wheels on both sides. To get at them you have to break the track.

When you change roadwheels, don't tighten the bolts in the two roadwheels too tight until you install the roadwheels on the hub. If you tighten 'em up too much, the pilot holes and the stud holes might not line up right and you'd have to start all over.

Roadwheel Sight Gages—Use a rag to clean the mud off the sight gages. If you use a screwdriver you can scratch the gages so you can't see the oil level.



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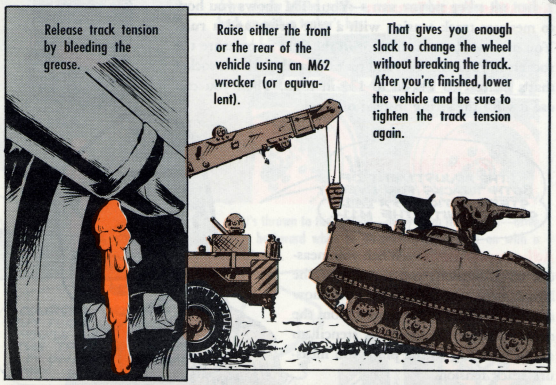

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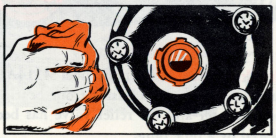
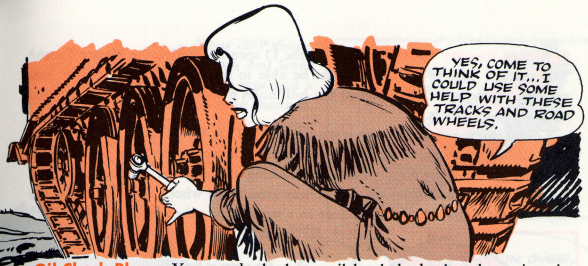
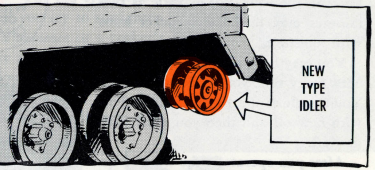




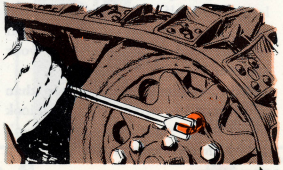
Oil Check Plugs—Your road wheel arm oil level check plugs have six-point heads so use a 6-point socket on 'em. Use the 9/16-in socket with your half-inch drive set. If you use a 12-point socket you'll round off the heads. The same thing goes for your roadwheel oil filler hub plugs. Use a 6-point 7/16-in socket on them.

These plugs are tapered so you won't need too much muscle.

Idler Wheels—The new all-steel idler should solve your "chunking" problem. In fact, you may already have the all-steel idlers on your particular vehicle.



Sprocket Bolts—Check your sprocket bolts every chance you get, because they'll work loose. If the bolt loosens and drops out that lets the sprocket have too much play and it soon wears out. Remember, it has to be a Grade 8 bolt.



MORE

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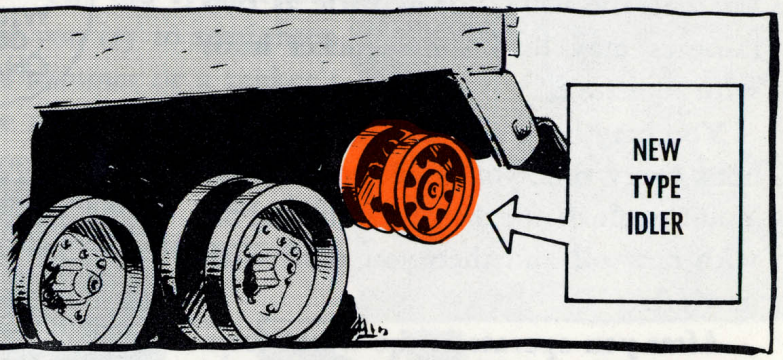

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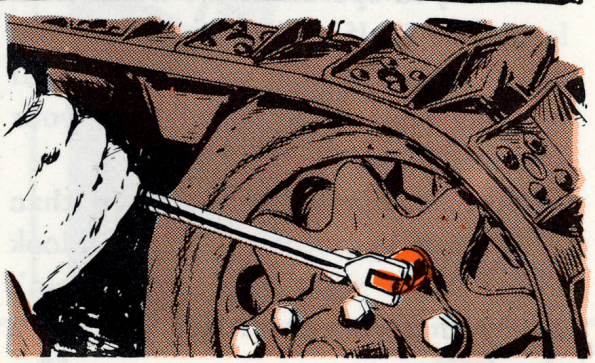
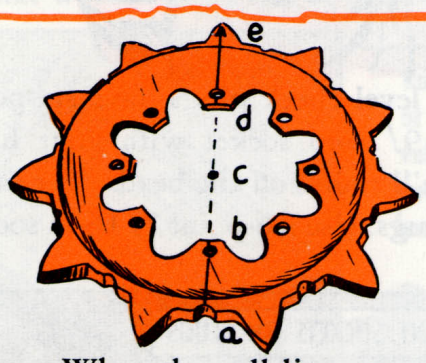


P.S. MORE

Sprocket Master Tooth—Which of the 11 sprocket teeth is the Master Tooth? You tracked vehicle mechanics must be able to solve this mystery before you can line up the sprocket wheel so the bolt holes match the bolt holes in the two track support wheels.

'Course this is easy if the tooth is stamped MASTER TOOTH . . . no mystery at all . . . but some of them were shipped from the factory before they got stamped. On these you find the master tooth by checking the notches, starting with any notch at random and working all the way around the wheel. Stretch a string (or any straight edged object) so it goes in a straight line through these points:



a. The center of the notch
b. The center of the bolt hole nearest to the notch
c. The center of the sprocket wheel
d. The center of the bolt hole on the far side
e. The center of the tooth

When they all line up . . . that's the master tooth. MARK IT.

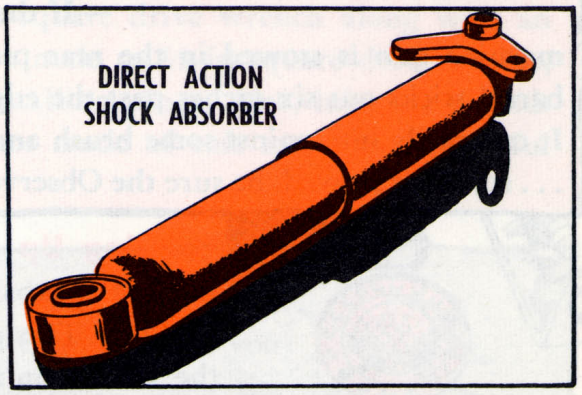
Sprocket Lube—The present seal is good at keeping oil in but not so good at keeping water out. A new seal that will be good in both directions is in the works but for now you've got to live with the fact that running your Scout in the water for as little as two minutes may load the sprocket hubs with moisture.

You may have to drain the sprocket hubs every time you dunk your Scout. You first flush out the contaminated oil with new oil and then you refill with new oil.

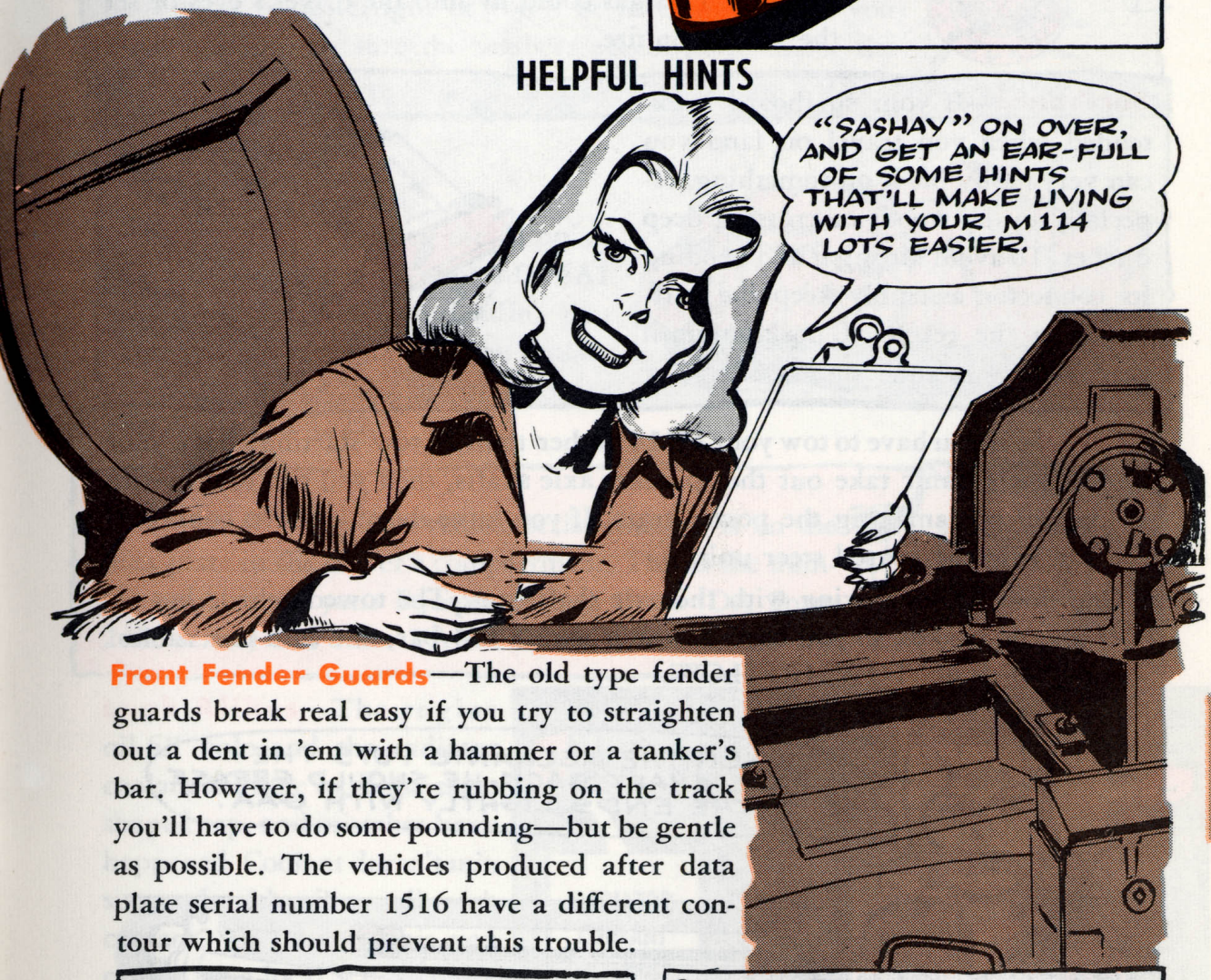
After you operate in the water for a long time (half an hour or more) you might need a change of oil in several of your roadwheels as well as your sprocket hubs.

Oil contaminated with no more than 2/10ths of 1 percent of water will look milky in the sight gages so you can't go by that entirely. After you get a little experience you'll be able to judge when the oil has just a trace of water and when it's dangerously contaminated.

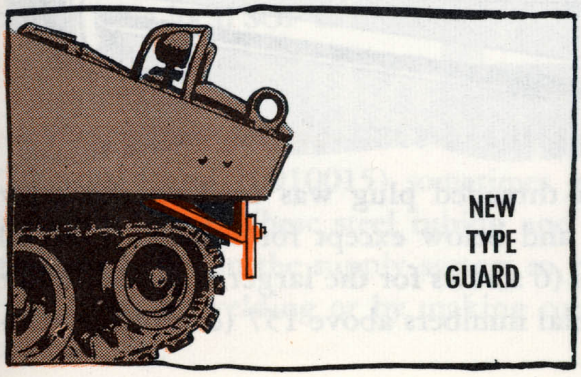
—Your -20P shows two different kinds of cam and lever shock absorbers, a left-side type and a right-side type. This has been changed. Now there is only one kind, a direct action job (FSN 2540-981-8612 until present stocks are exhausted then FSN 2540-010-0293).

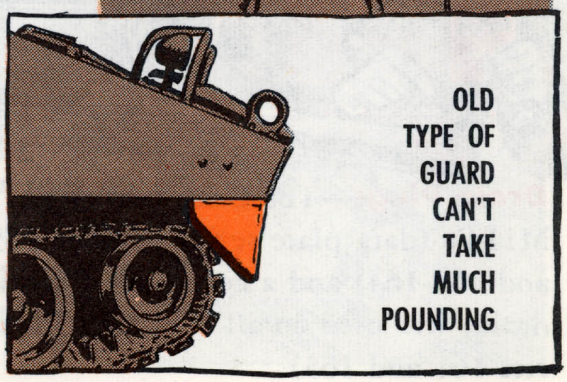


HELPFUL HINTS



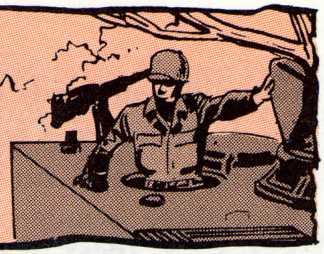
Front Fender Guards—The old type fender guards break real easy if you try to straighten out a dent in 'em with a hammer or a tanker's bar. However, if they're rubbing on the track you'll have to do some pounding—but be gentle as possible. The vehicles produced after data plate serial number 1516 have a different contour which should prevent this trouble.

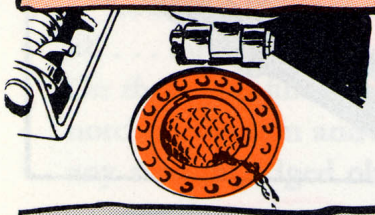




PS MORE

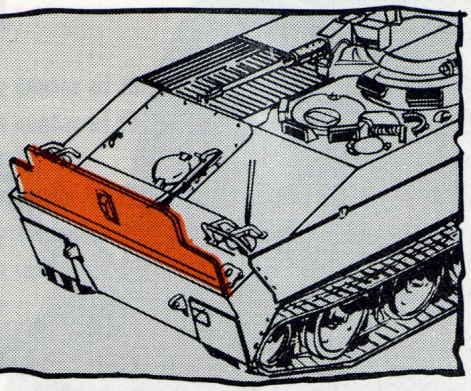
Observer's Pedestal Mount—If the Observer's M60 machine gun is stowed in the rear pintle support, the barrel sticks out six inches past the edge of the vehicle. It can easily hit against some brush and get knocked off . . . so, if it's stowed, be sure the Observer is observing it.





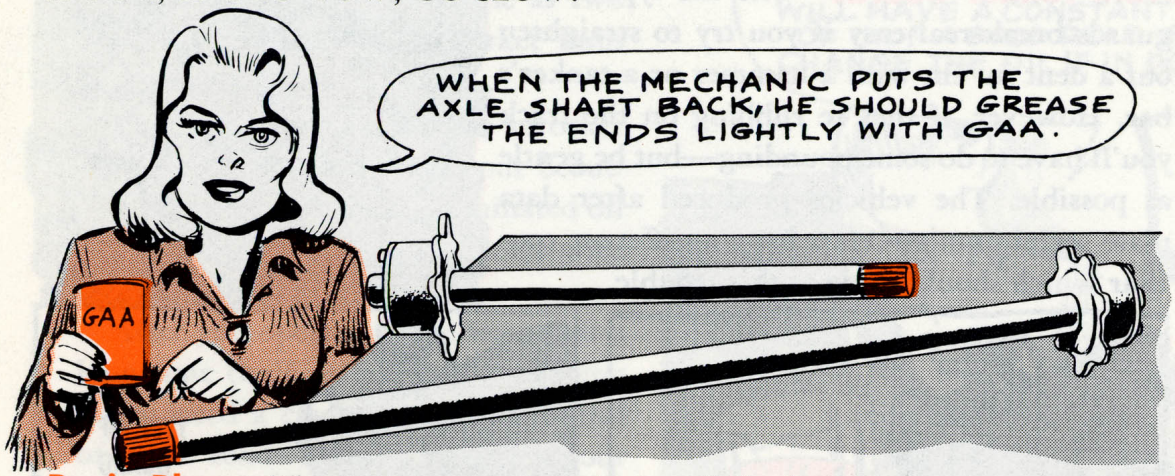
Gassing Up—When you refuel your Scout, leave 6 inches for expansion. If you fill clear to the top, gas will slop out. This gas could fly into the driver's eyes or set the vehicle on fire.

Surfboard—If your surfboard is extended when you travel on land you can very easily hit it on something, especially in the woods or crossing deep ditches. To avoid hitting it and bending its connector assembly keep the surfboard in the retracted position until you're ready to enter the water.



Towing—If you have to tow your M114 (other than in tow starting) have your company mechanic take out the sprocket axle shafts, then you can tow it with no danger of damaging the power train. If you leave the axle shafts connected you can ruin the geared steer unit.

One thing about towing with the axle shafts out: The towed vehicle has no steer and no brakes, so you have to tow it with a tow bar, not with tow cables. So-o-o-o, IF YOU TOW, GO SLOW.

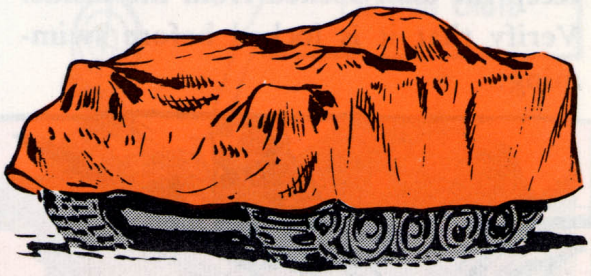


Drain Plugs—There are two types. A threaded plug was used on the early M114's (data plate serial number 165 and below except for vehicles 158-160 and 162-164) and a type with 4 screws (6 screws for the larger engine oil filter drain) was used on all vehicles with serial numbers above 157 (except for vehicles 161 and 165).

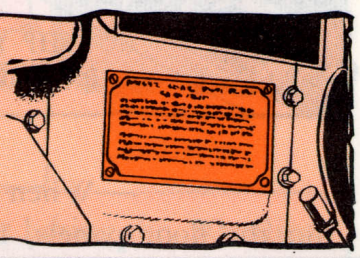
For the threaded plugs you use a ½-in square drive wrench along with an adapter-socket wrench ¾-in square drive male to ½-in square drive female, FSN 5120-240-8701, for removing or installing plugs. Also, lube the threads lightly with GAA grease. These plugs are made of soft metal so be careful of cross-threading.

Engine Compartment Access Cover—The front slope plate must be watertight or you'll be in trouble when you go swimming. Be sure the washers are in place under the attaching screws.

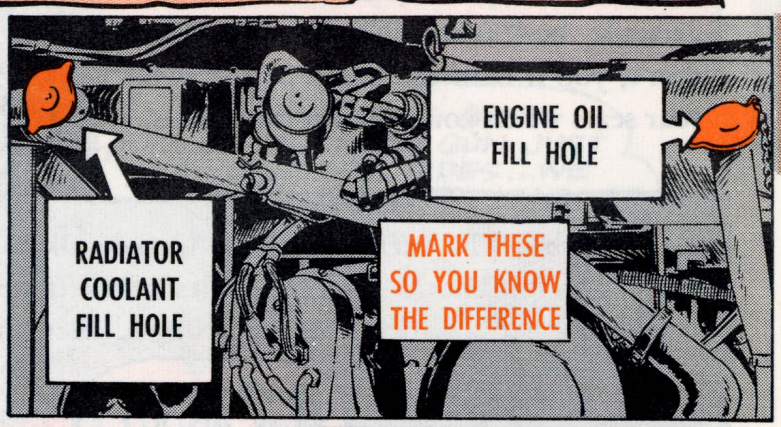
Shipping Cover—Keep the shipping cover that comes with your M114A1 and use it as the vehicle paulin. You carry it in the right, rear, hull plate extension. If you don't have one, order FSN 8340-256-4122.



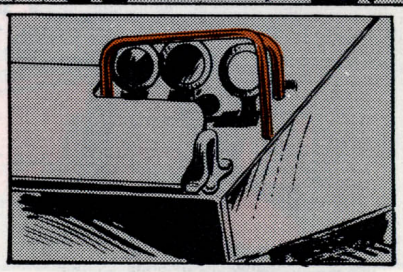
Serial Number—The vehicle serial number is on the data plate in the driver's compartment. This is the number you use on your Equipment Log Book (DA Form 2408 series) and other TAERS forms.



Look Alikes—The engine oil-fill hole and the radiator coolant fill-hole have the same shaped cap, and mistakes have happened. Coolant doesn't mix so good with oil or oil with coolant. To prevent this you can set up a local SOP to mark the oil-fill points.



Headlight Guards—The headlight guards, (10910014 and 10910015) sometimes get torn off in heavy brush. These steel tubing and angle iron guards are not in the supply system so you have to repair 'em by welding or by making complete new ones locally.

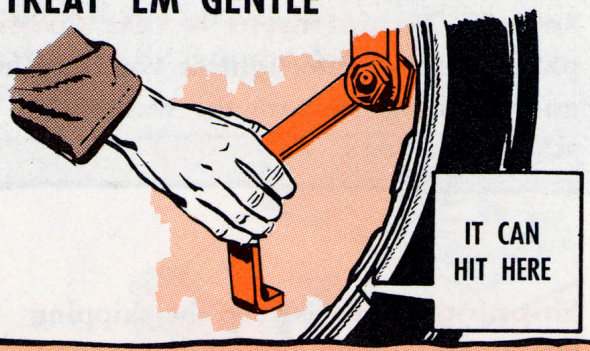


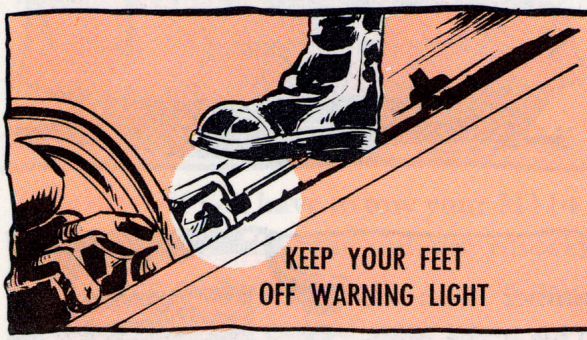
PS MORE

New Fan Belts—The matched set of three V-belts listed as Item 20, page 27, of your TM 9-2320-224-20P (Jul 62) has been improved. The new belts can stand up longer under high tension. They'll be listed under FSN 3030-967-3344 and each individual belt will be marked (10922131) instead of (10920729). You might want to jot this down in your parts manual.

BE MENTAL AND TREAT 'EM GENTLE

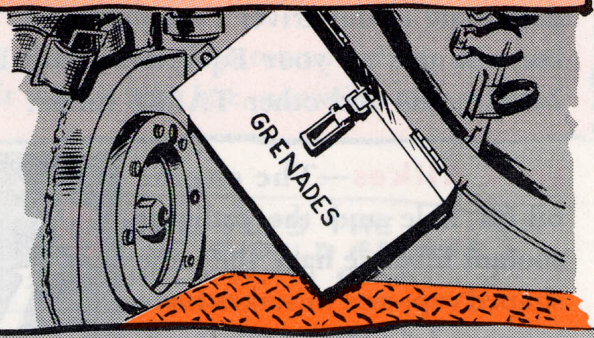
Rear Door Latch—Go a little easy on it. The inner handle can rip through the seal retainer and make the seal leak. Keep the door locked from the inside. Verify that it is locked before swimming.



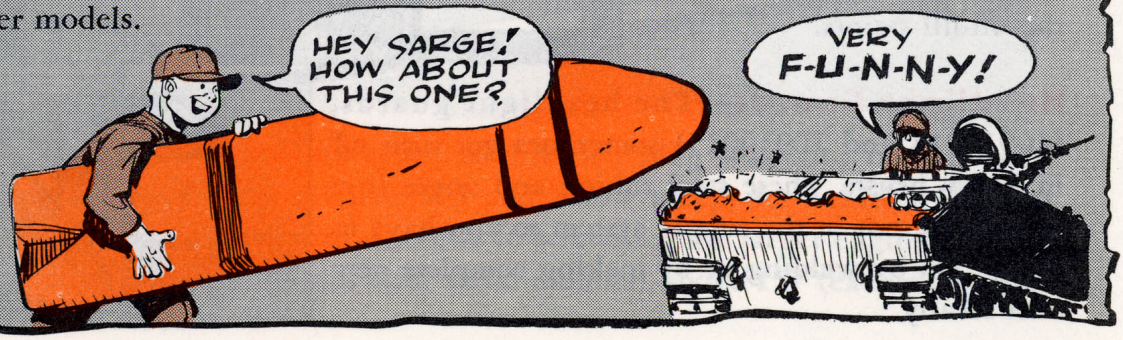


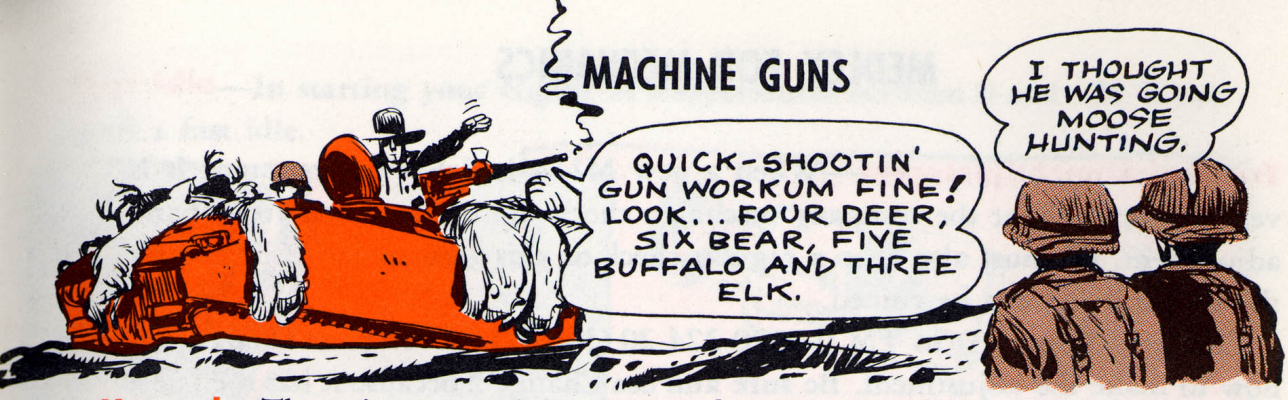
Warning Light Warning—The power plant master warning light is in a handy place for the driver to see it. Also, it is in a handy place for getting stepped on by anybody walking on the front slope of the vehicle . . . so be hep and watch your step.

Floor Panels—When you have to take out the floor panels, first remove the grenade box from the floor. If you don't, you'll ruin the backs of the two rear seats when you pull out the panels.

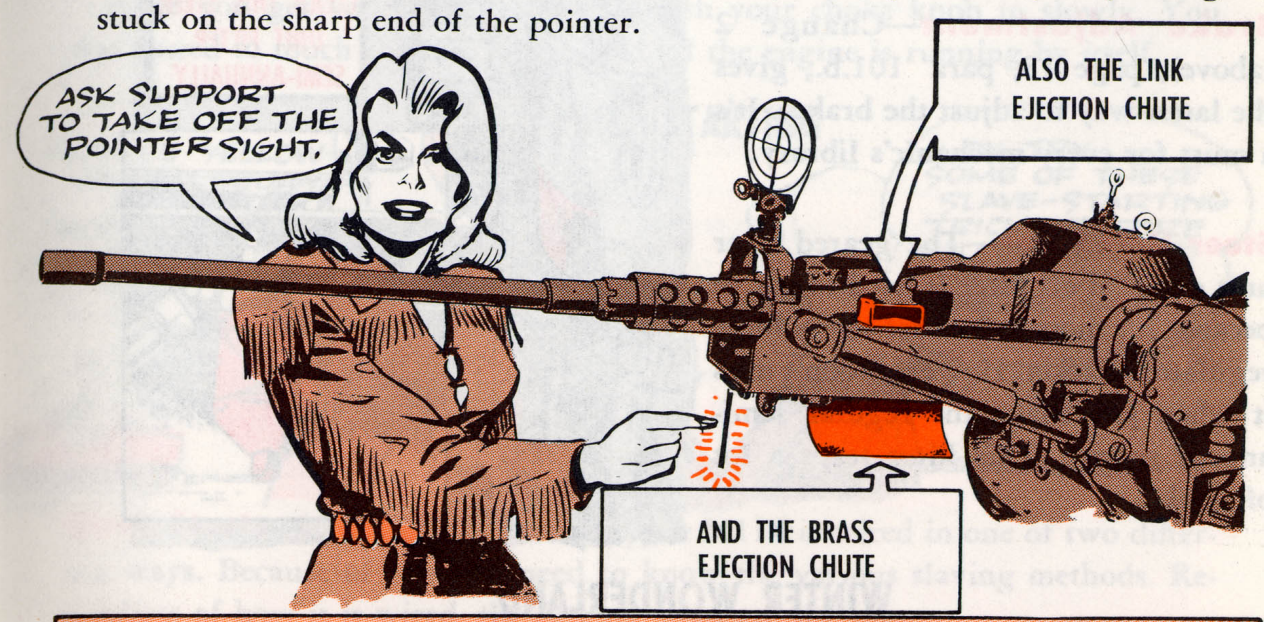


Surfboard—The surfboard is no boardwalk so don't step on it any more than you can help. The M114A1 vehicles serial number 1215 and above have plywood surfboards which are more rugged than the aluminum surfboards of the earlier models.



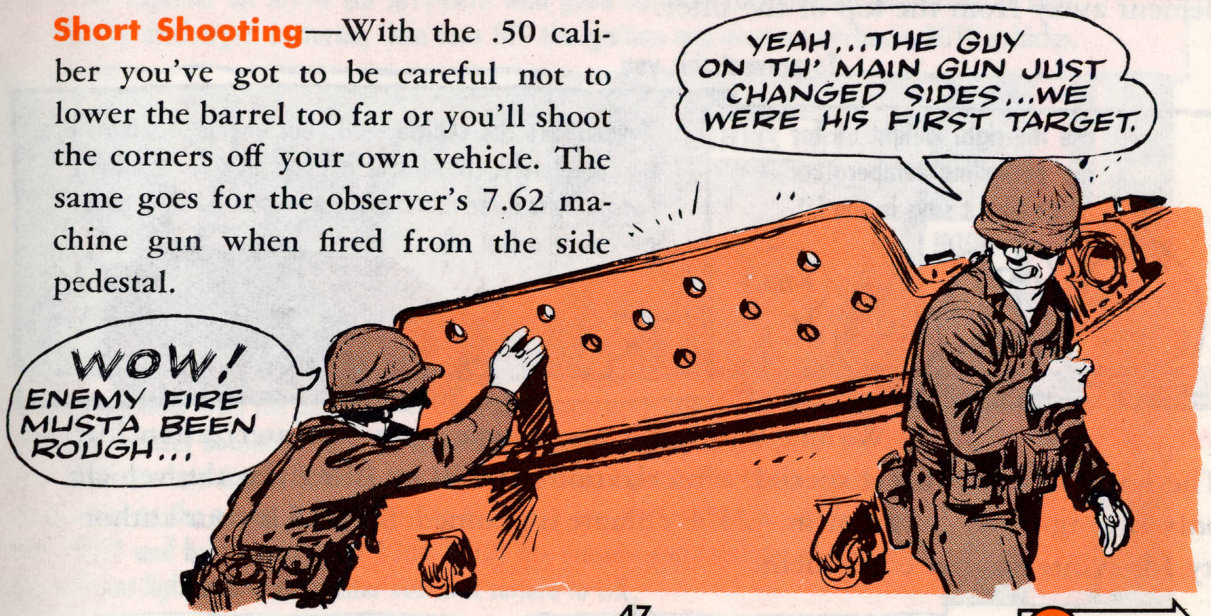


Hazard—The pointer gun sight causes a dangerous condition for the driver or the observer when it is over their heads. If they rise up suddenly they can get stuck on the sharp end of the pointer.



Lubrication—The LO for the vehicle has nothing about lubing the .50 caliber M2HB machine gun. You'll find info on this in LO 9-1005-233-10.

Short Shooting—With the .50 caliber you've got to be careful not to lower the barrel too far or you'll shoot the corners off your own vehicle. The same goes for the observer's 7.62 machine gun when fired from the side pedestal.



P.S MORE

MEDLEY FOR MECHANICS

Transmission Adjustment—When a new M114 is delivered to a unit it is very important that the company mechanic check the transmission front band adjustment. He must also keep a regular check on this adjustment. If he doesn't the transmission can be ruined.

Change 2 (Aug 63) to TM 9-2320-224-20 (Jun 62) tells on page 18, para 96, how to make the adjustment. Be sure and use Change 2 because it has the latest dope.

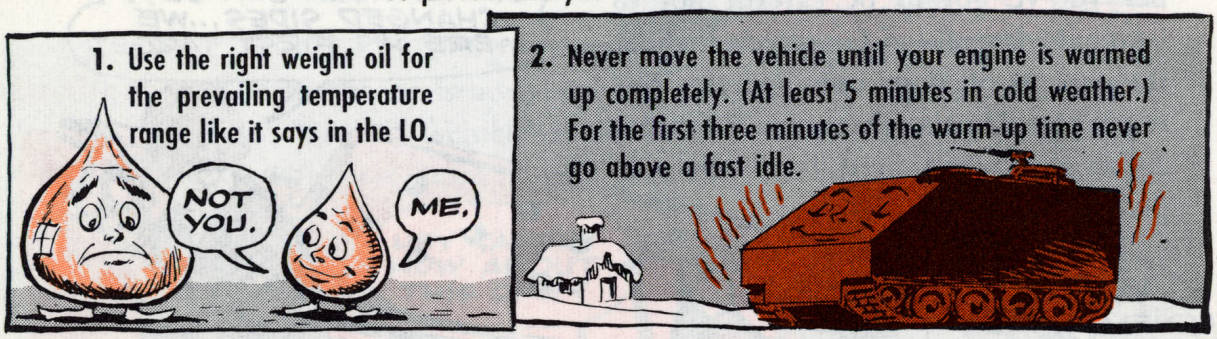
Brake Adjustment—Change 2 (above), page 18, para 101.b., gives the latest way to adjust the brakes. It's a must for every mechanic's library.

Steer Unit Filter—The geared steer unit external oil filter is hard to get to because it's mounted under the voltage regulator bracket. However, don't miss it when you make the regular semi-annual service. This filter traps a lot of gook.

WINTER WONDERLAND

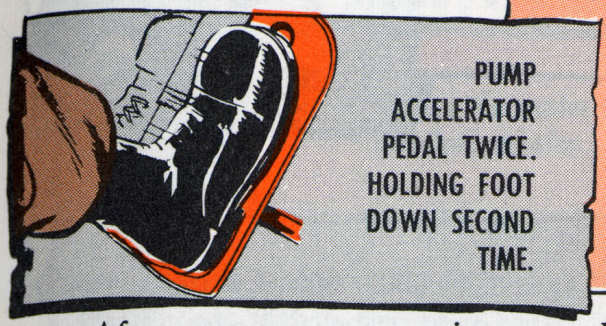
Oil Filter Foul-up—In cold weather (zero or below) your geared steer oil filter takes a terrific pounding. In a couple cases the stiff oil hammered the filter element away from the top of the filter.

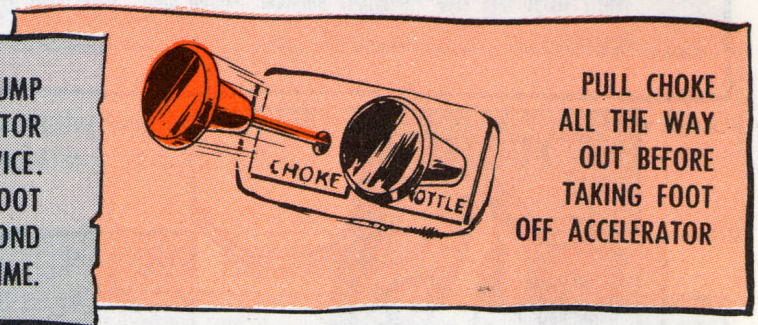
To prevent this you . . .



Winterization Kit—Wanna know if your vehicle rates a winterization kit? The latest word is that a special winterization kit will be issued for the vehicle only if long-time operation in −25°F climate is planned. SB 9-16 is your authority for winterization equipment.

Fast Idle—In starting your engine at temperatures between 0 and −25°F you need a fast idle.





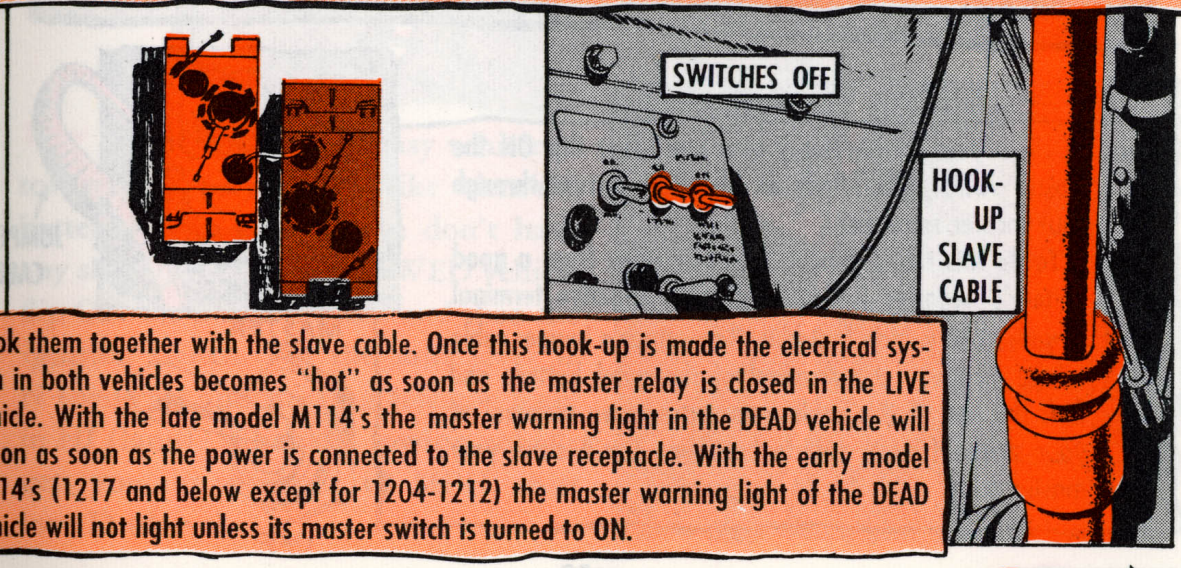
After you get your engine started, push your choke knob in slowly. You don't need to touch the throttle knob until the engine is running by itself.

AUXILIARY STARTING

Slave Starts—The master switch in your M114 is wired in one of two different ways. Because of this you need to know the various slaving methods. Regardless of how it is wired, the first six steps are the same.

It's done like this . . .

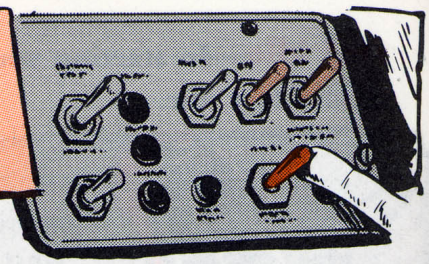
1. Bring together an M114 (or M114A1) with good batteries and another with weak or completely discharged batteries, then turn OFF the ignition and master switches in BOTH vehicles.

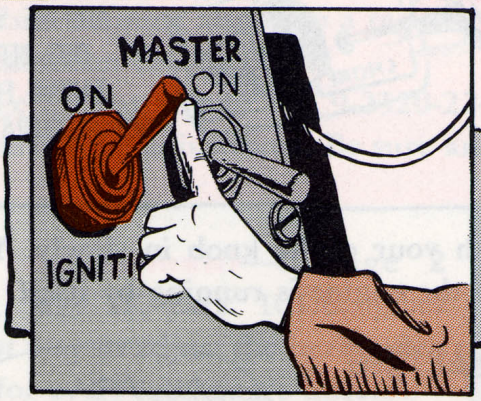


2. Hook them together with the slave cable. Once this hook-up is made the electrical system in both vehicles becomes "hot" as soon as the master relay is closed in the LIVE vehicle. With the late model M114's the master warning light in the DEAD vehicle will go on as soon as the power is connected to the slave receptacle. With the early model M114's (1217 and below except for 1204-1212) the master warning light of the DEAD vehicle will not light unless its master switch is turned to ON.

MORE

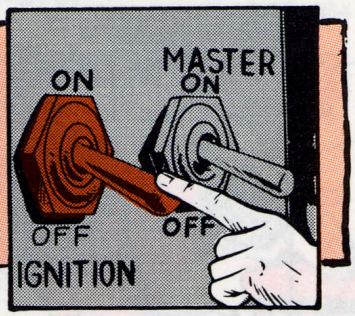
3. In the LIVE vehicle . . . first turn the master switch ON. Then turn ON the ignition switch. Now start and run the engine.





4. Next, the DEAD vehicle. Turn on the ignition switch and start its engine. LEAVE THE MASTER SWITCH OFF.

DEAD VEHICLE



5. After the DEAD (slaved) vehicle engine starts, turn OFF the ignition switch in the LIVE vehicle. Slaved vehicle engine will run OK. It'll draw juice from the batteries in the LIVE vehicle. Do this because you can't be sure two generators will operate in parallel without causing trouble.

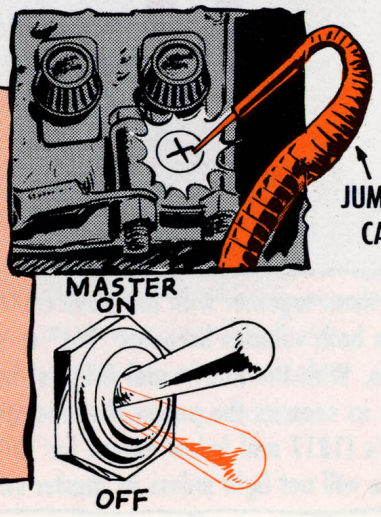
6. Slaved (DEAD) vehicle . . . let the engine warm up 5 to 10 minutes. Then turn its master switch ON to connect its batteries.

If the slaved (DEAD) vehicle has late model master switch wiring, (serial number 1218 and above plus 1204-1212) flipping its master switch to the ON will connect the batteries . . . so jump to Step 7.

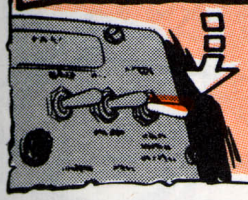
If, on 'tuther hand, the slaved (DEAD) vehicle has its master switch wired the early way (serial numbers 1217 and below except serial numbers 1204-1212) you need another step in here. Call it 6a.

6a. To close your master relay you must first flip ON the master switch, then flash an electrical current through your master relay coil.

To do this run a jumper (booster) cable from a good battery's negative (–) terminal to a negative terminal of your DEAD vehicle batteries. Now attach a jumper cable to the positive (+) terminal of the good battery and flick the end of this cable across a positive terminal of your slaved (DEAD) vehicle batteries. This'll close your master relay.



7. Whether your last step was 6 or 6a, your master switch is now ON in the slaved (DEAD) vehicle. Just let the batteries charge for a few minutes.

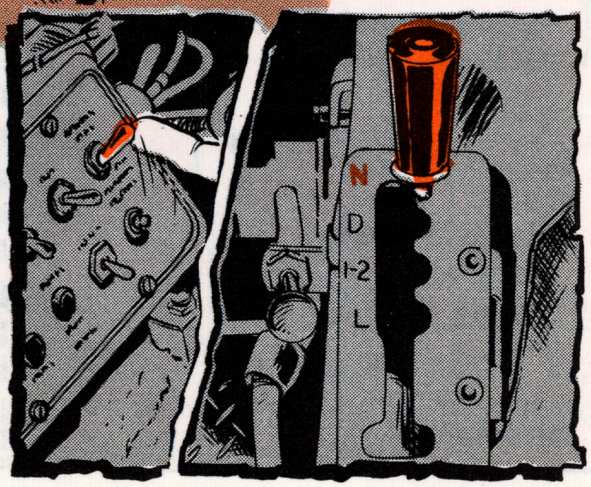


8. Flip OFF the master switch in your LIVE vehicle, disconnect the slave cable from both vehicles... and that's it.

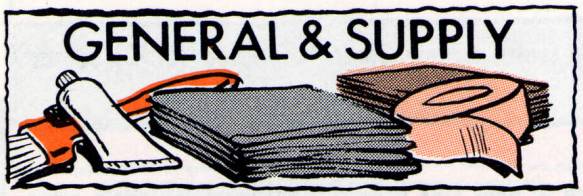
TO STOP YOUR ENGINE

A point to remember . . . to stop your engine first turn OFF the ignition switch. After the engine has stopped turning over, turn OFF the master switch.

Tow Starts—This is an easy vehicle to tow start if you need to—like when the batteries are low and you don't have any slave cable. In the TOWED vehicle flip ON the master switch and then the ignition switch. Put the shift lever in N (neutral) and steering selector lever in HI (land). When the towing vehicle gets you up to about 12 MPH, shift into D (drive).

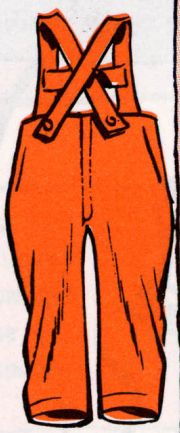


END

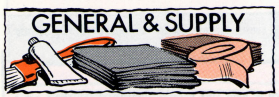

GENERAL & SUPPLY

DON'T FORGET YOUR
RUBBERS!

Nothing can dampen your spirit like a rubber item that leaks. Yessir, a rip or tear in your poncho, raincoat, boots, wet weather overalls or pneumatic mattress will leave you mighty miserable.



	Poncho, Coated Nylon	Overalls, Wet Weather	Boots, Cold Weather	Mattress, Pneumatic
Adhesive, Liquid, Cement, Butyl Synthetic FSN 8040-264-3848 C8000-IL (Jan 64)	X	X		X
Tape, Pressure Sensitive, Olive Drab FSN 8135-266-5006 C8135-IL-A (1 Jul 64)	X	X		
Maintenance Kit, Cold Weather FSN 8465-543-7420 C8440/70-IL-A (Mar 64)			X	X
Cannibalization	X	X		X



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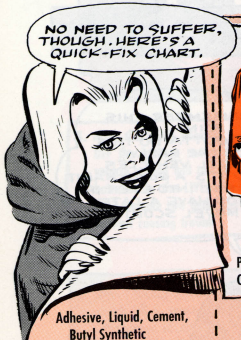

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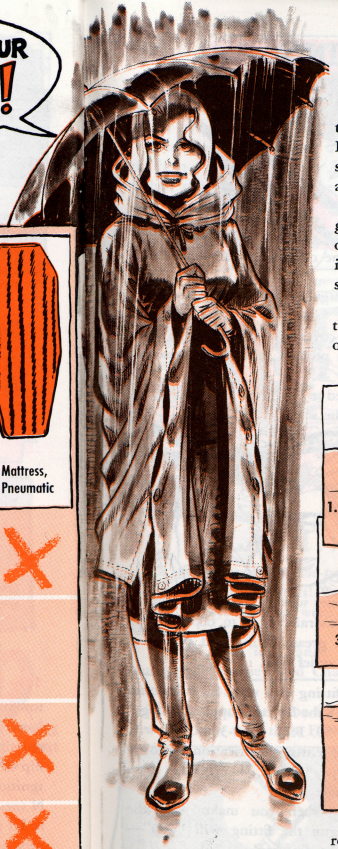
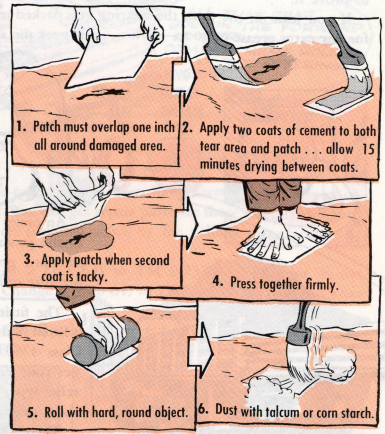


The cold-weather repair kit for boots and mattresses is so tiny you can carry it in your boot or bag. It works like a tire patch and will take care of any small puncture or tear. The instructions on the kit are easy to follow, too.

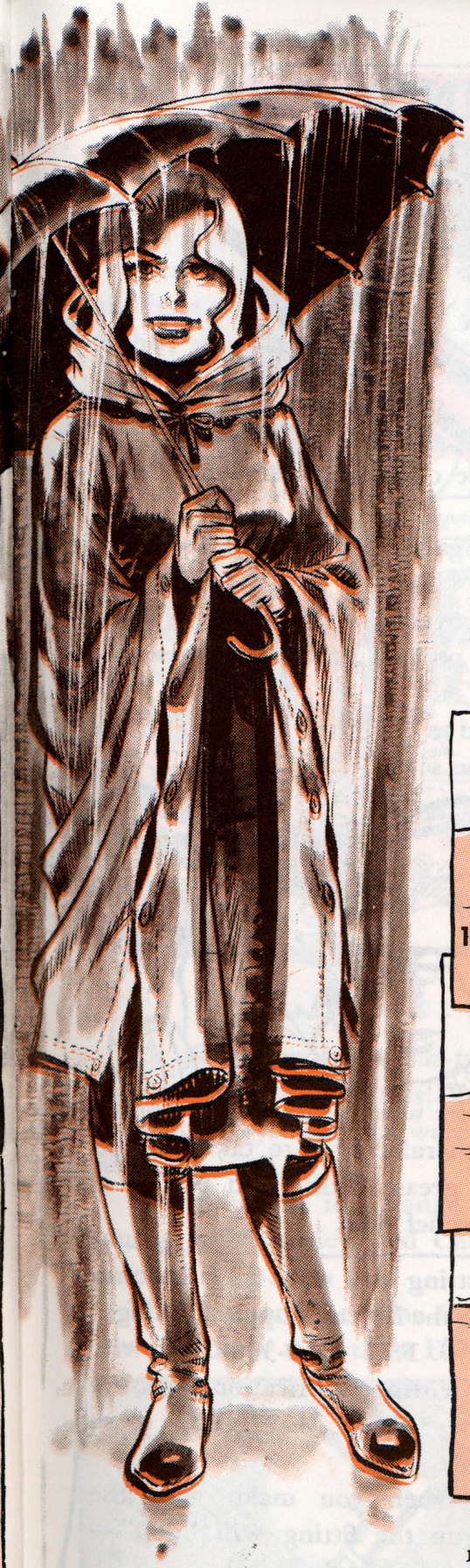
The pressure-sensitive tape can be used for emergency repair of raincoats, ponchos and wet weather overalls; but this is only a temporary repair and the item should be turned in for permanent repair as soon as possible.

When patching a raincoat, poncho or overalls, use the liquid adhesive cement with coated nylon cloth or a piece snitched off an unserviceable garment.

HERE'S HOW:



If the holes or rips are too big for you to fix, return the garment to your support people, like it says in TB QM's 96 and 98 (both 10 Aug 59).



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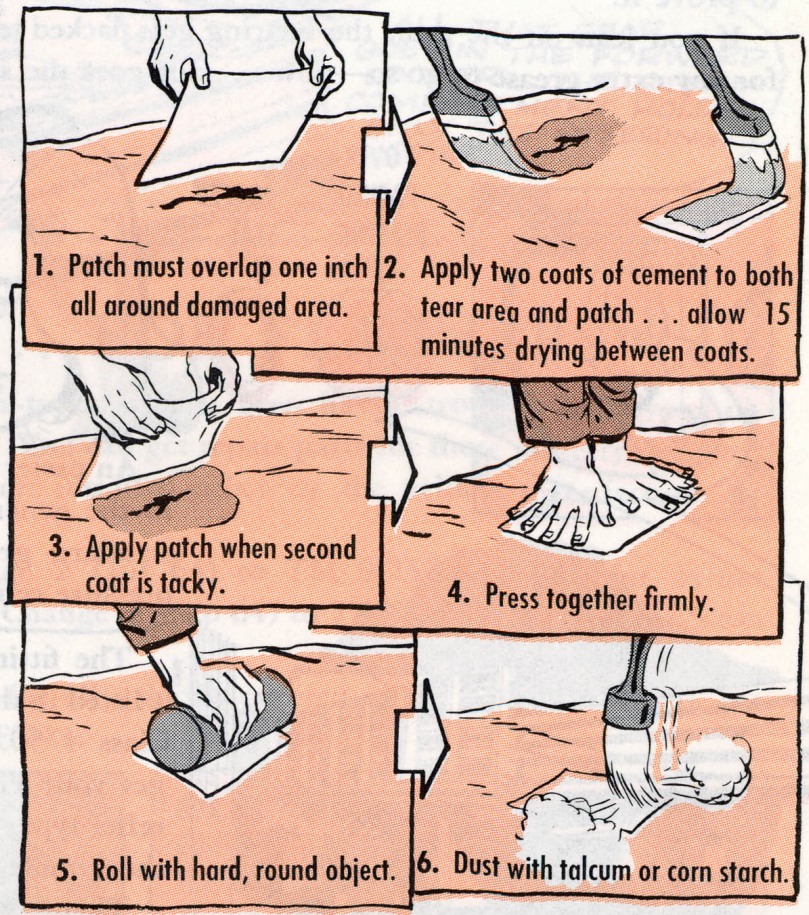

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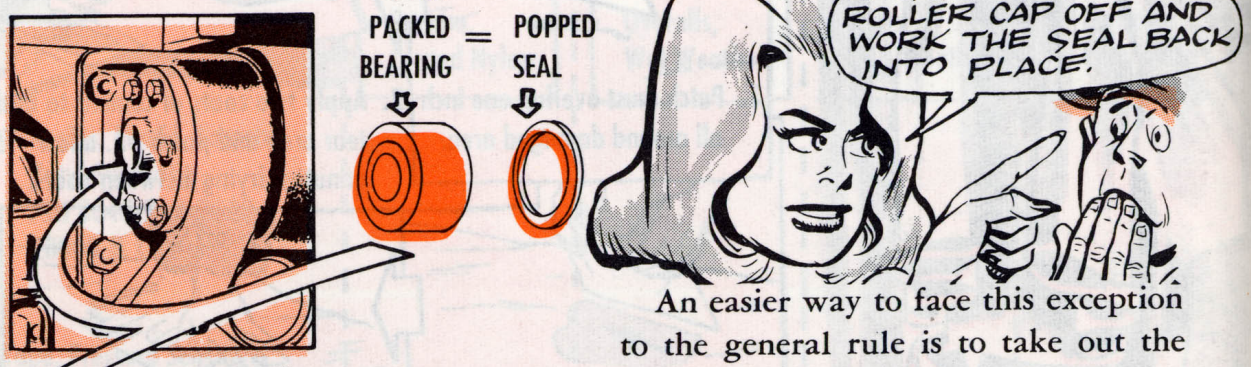
KEEP 'EM ROLLING

Sometimes a guy can get crossed up in a routine operation, like when he's greasing a 5-ton bridge transport truck.

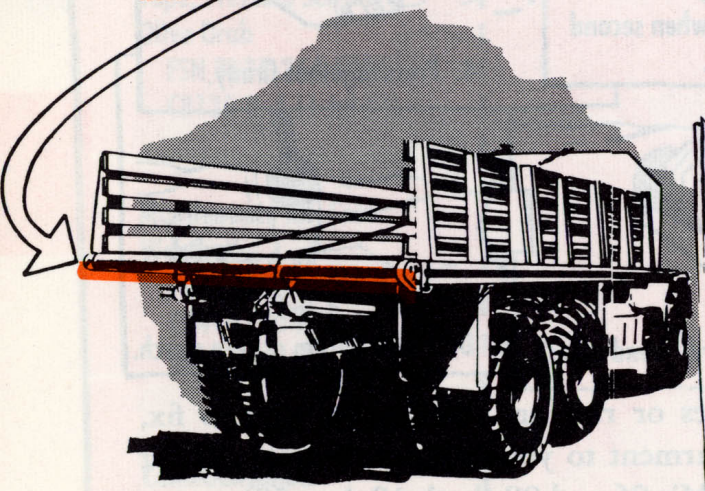
Sure he lets go with the grease gun on the fittings until he spots grease oozing out where it's supposed to—no sweat.

But, this deal won't work on the loading roller, covered in LO 5-8063 (8 Dec 52), and there's a lot of these trucks around with popped roller bearing seals to prove it.

If you lean on the gun, the bearing gets packed to the hilt. There's no place for any extra grease to go so—pow . . . out goes the seal.



An easier way to face this exception to the general rule is to take out the standard grease fitting and put in a pressure relief type.



The fitting you want to latch onto is listed in the Federal Supply Catalogs, Class 4730. FSN 4730-330-0111 will get you: Fitting, lubrication, pressure relief type, 1-5 PSI, ⅛-27NPTF, extra short male.

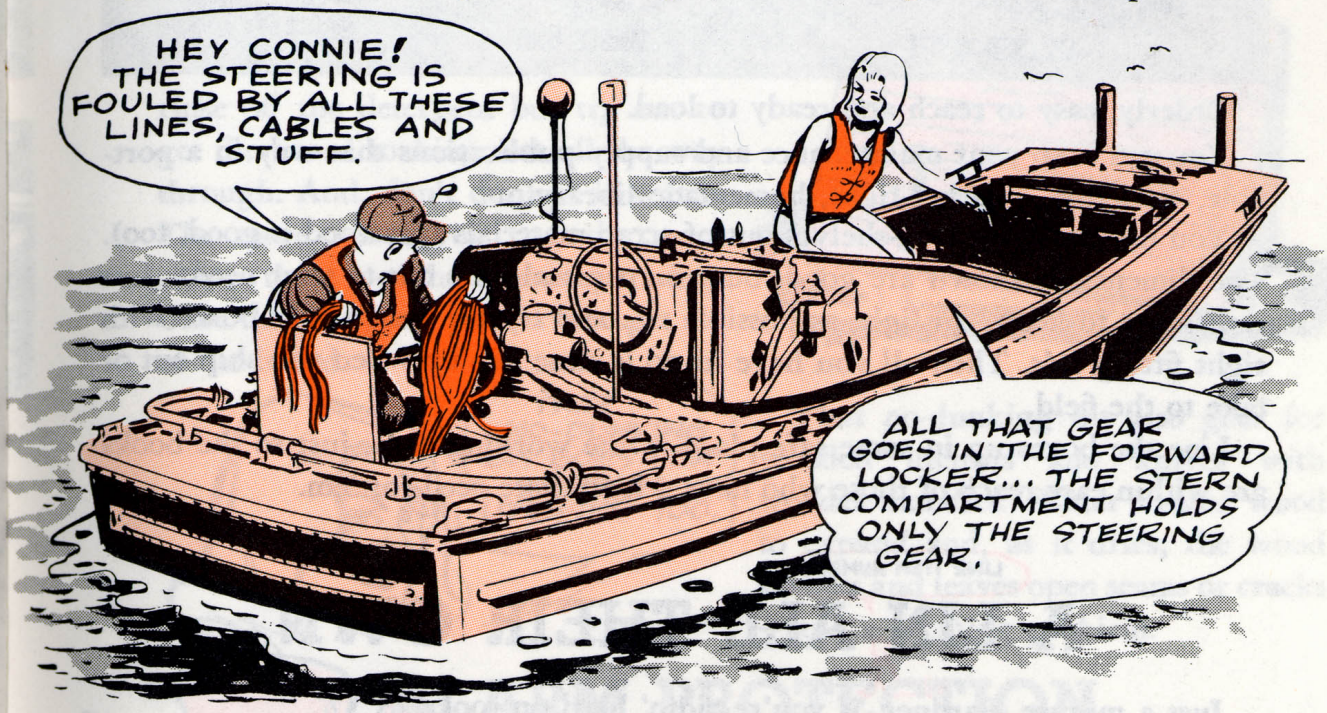
Then when you make with the grease gun the fitting will "pop"—not the bearing seal.

STOW IT RIGHT

You say you don't know your stem from your stern when it comes to stowing gear in your 27-foot bridge erection boats?

No sweat.

Just remember you have a storage compartment in the bow . . . or front of the boat . . . for your gear. Accessories for the boat like post lights, running lights, spot lights, life preservers, ropes and cables go in this compartment.

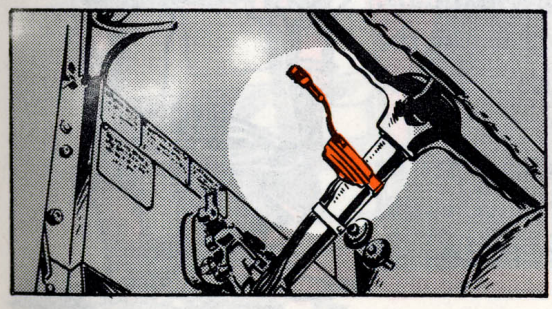


FLASH . . . FOR FLASHERS

All you support vehicle-types who've been havin' troubles with your directional signals, hear this! You can get repair parts for those military-designed turn signal systems that were installed either by the vehicle manufacturer or MWO 9-2300-263-20.

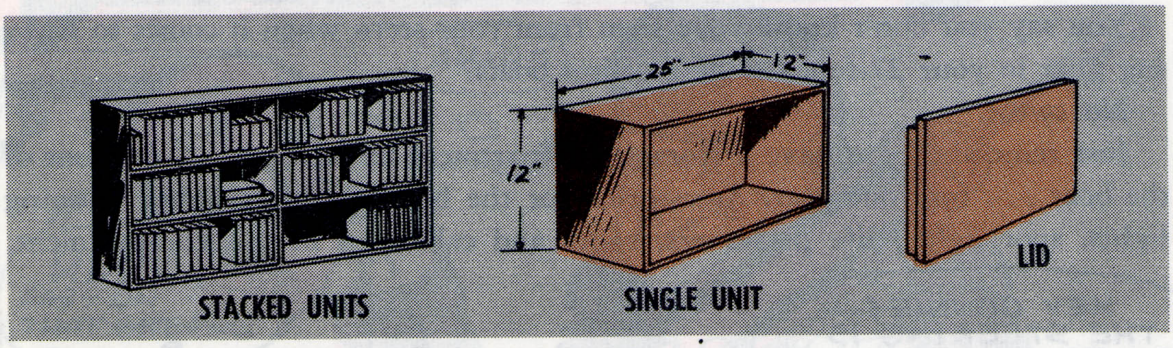
They're listed in Change 2 (Jul 64) to TM 9-2320-212-20P for ¾-ton trucks (G741 series) and Change 1 (Sep 64) to TM 9-2320-211-20P for 5-ton truck (G744).

The parts are the same for all vehicles covered in the MWO. You can get 'em right now with these FSN's:



BOX, DISTRIBUTION: FSN 2590-953-2179
CONTROL, TURN SIGNAL: FSN 2540-953-2180
FLASHER, TURN SIGNAL: FSN 5945-952-3818
GASKET, DISTRIBUTION BOX: FSN 2590-953-2177
LAMP, INCANDESCENT: FSN 6240-155-8714
LENS, TURN SIGNAL HANDLE: FSN 5850-076-8992

FOR SERVICE . . . NOT FOR SHOW



Orderly, easy to reach and ready to load. .

You can keep your maintenance and supply publications that way in a portable, stackable, weather-tight, homemade library.

You can make the box-shelves out of scrap materials (plywood is good, too). The dimensions shown are good, but you can scale 'em out to your needs. Just remember to keep 'em light as possible . . . and try for water-tight boxes with tight fitting lids. Then all you have to do is close 'em up when you ship out or take to the field.

Line the boxes up in some safe place in the working area, just so the books are within easy reach of those who have a legitimate need for 'em.

LINE ITEM NUMBER

A LIN ALL THEIR OWN

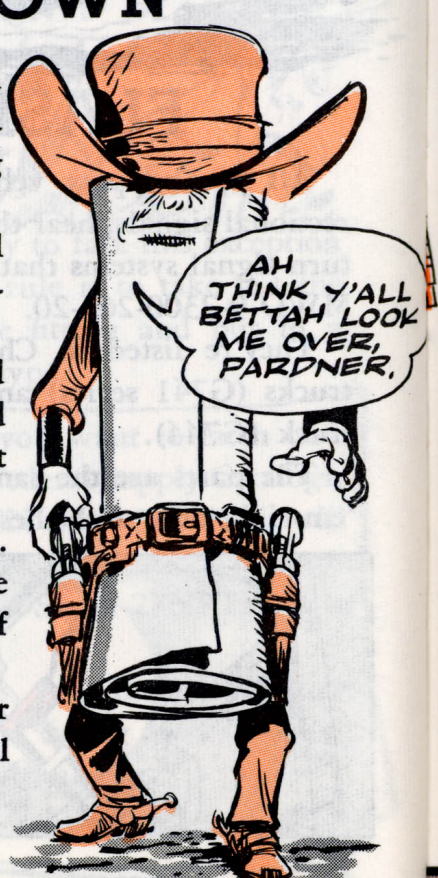
Just a minute, Pardner, if you're ridin' herd on tool sets or kits. Better pull up a bale of straw and take a load off of your feet 'cause here's some news that's going to interest you. . . .

There's a DA Circular 725-5 (30 Jun 64), "Removal of Components from Assemblages and Sets of Equipment," that affects your tool kits and sets.

The gist of the circular is that some generators and compressors are no longer a part of many tool kits and shop sets. They became separate line items of equipment as of 1 Oct 64.

These changes will show up in your supply manuals. The TOE's and TA's are getting revised to show the compressors and generators as separate line items of equipment.

This means that when you're ordering a tool set or kit that formerly had the compressor or generator, you'll have to requisition the deleted items individually.



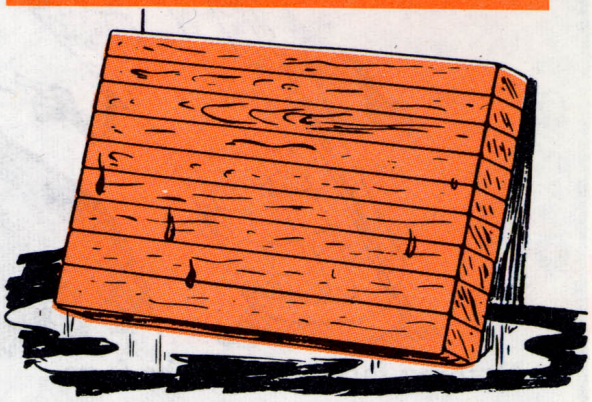
NO DISINFECTANT, PLEASE

It's real simple to clean the food-chopping board (FSN 7330-281-4695). After you use the board (and the sooner after use the better) use a detergent solution or hot soapy water and a stiff scrub brush on it. Then rinse with clear, hot water.

You want to use enough water to rinse off the detergent but try not to get the board soaking wet all the way through. And, don't dunk it in water. The more water you use, the more chance there is of the layers separating. Once that happens, you have to get rid of the board.

After you've rinsed the board, stand it on edge and let it air-dry.

The detergent or hot soapy water should do the cleaning job so keep disinfectant solutions away from the board.



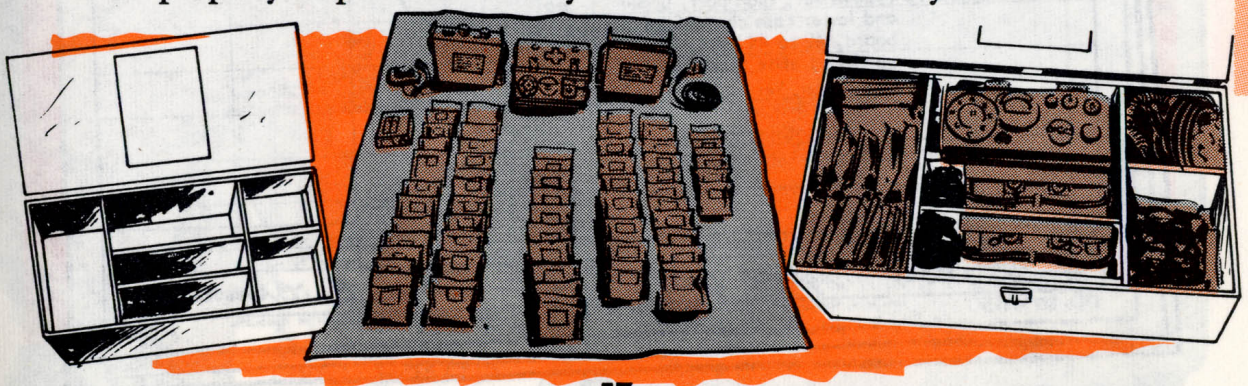
That no-dunking bit also goes for wooden utensils and knives with wooden handles. Water causes wood to expand and, as it dries, the wood shrinks and leaves open seams or cracks —and a cleaning problem.

ALARM PROTECTION

A standard wooden footlocker, some suitable boards for partitions, and a little carpentry are all it takes to give your VG Alarm E41R3 (FSN 6665-671-9584) and its components a good home. The sturdy box also solves the handling problems you have when you keep the alarm and its components in cardboard boxes.

The box takes the alarm unit, reagent kit, the two batteries and the electrical headset and special purpose cable.

Your property disposal center may have some footlockers you can use.



DD FORM 1150...THE H/R's HELPER

Nothing fancy... Just the facts.

That's all the supply scoop you need on DD Form 1150 "Request for Issue or Turn-in".

The multicolored, three-copy form is OK'd as the issue and turn-in form twixt property book officers and their handreceipt holders. See para 13c, Change 4 (27 Nov 63), AR 735-35 "Supply Procedures for TOE Units, Organizations, and Non-TOE Activities".

But don't get shook-up by the form's various blocks and spaces. When it's used as a side-kick for DA Form 2062 "Handreceipt" you fill-in only a minimum number of its blocks and columns. For example, here's a sample:

☆ U. S. GOVERNMENT PRINTING OFFICE: 1963 — 704-856

REQUEST FOR ISSUE OR TURN-IN (AR 735-28)

ISSUE: XX | TURN-IN | SHEET NO. | NO. OF SHEETS

5. REQUEST NUMBER

1. FROM: PS Magazine Ofc H/R 65

6. DATE MATERIEL REQUIRED | 7. PRIORITY

2. TO: Supply And Service Br

8. VOUCHER NUMBER | 9. POSTED DATE BY DATE BY

3. ACCOUNTING AND FUNDING DATA | a. COST ACCOUNT CODE | b. WORK ORDER NUMBER

4. END ITEM IDENTIFICATION | a. NAME AND MANUFACTURER | b. MODEL | c. SERIAL NUMBER | d. PUBLICATION

ITEM NO. a	STOCK NUMBER, DESCRIPTION AND CODING OF MATERIEL AND/OR SERVICES b	SUB CODE c	UNIT d	QUANTITY e	SUPPLY ACTION f	UNIT PRICE g	TOTAL COST h
1.	7430-254-4313 Typewriter, Non port, upper and lower case char AS keyboard, 42 to 44 keys, 13" carriage, elite type, Make: Remington, Ser No. J2862355		ea	1	I		
	Nothing Follows						

SHEET TOTAL

GRAND TOTAL

*ISSUE—I-Initial, R-Replacement TURN-IN—U-Unserviceable, S-Serviceable

10. ISSUE OR TURN-IN OF QUANTITIES IN "QUANTITY" COLUMN IS REQUESTED | DATE 3 FEB 65 | BY MSgt R. Jet

11. RECEIVED QUANTITIES IN "SUPPLY ACTION" COLUMN | DATE 3 FEB 65 | BY B. Brownie

DD, FORM OCT 57, 1150 REPLACES EDITION OF 1 JUL 56 WHICH MAY BE USED AND DA FORM 5-102, 1 FEB 56, WHICH IS OBSOLETE.

1

PROPERTY BOOK ANNEX

Dear Half-Mast,

Does a TOE unit need a separate set of supply records to account for its classified items . . . a separate property book, document register and files, separate supply code and a separate PBO?

Should a property book covering classified property be consolidated with other property books at the battalion S4 section?

MSgt J. D. S.

Dear Sergeant J. D. S.,

The security classification of an item doesn't necessarily require you to record the item in a classified annex to your property book. Most classified items, you see, have unclassified nomenclature.

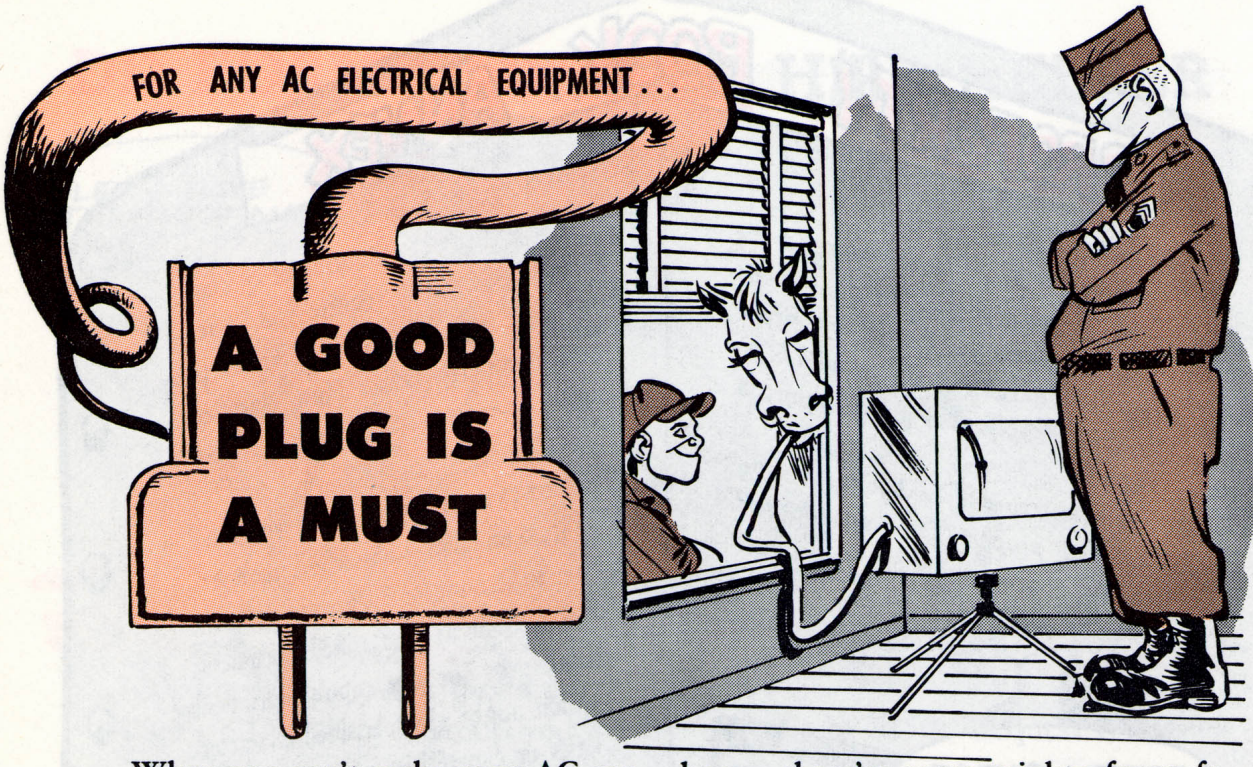
However, if the fact that you have an item on hand is classified, then you have to account for the item in an annex and treat it as a classified document. Same goes for any supply document which might give classified characteristics or capabilities of any item. The number of items you have might be classified, too.

For procedures on accounting for nuclear ordnance items see para 16c, AR 700-65 (4 Oct 62). For these items you need an annex to your property book even if they are unclassified.

The CO can reserve a separate block of document numbers for use on documents covering classified items if he wishes. And, depending on his unit's mission, his support activity, and the type of items involved, he may ask the installation commander for a separate supply code for his supply records on classified items.

As for maintaining property books at a battalion S4 section, AR 735-35, para 4b, says property books are to be kept at highest practical level. This goes regardless of the book's classification. Wherever an annex is kept, of course, the security SOP applies.

Half-Mast



When you can't make your AC connections any other way, you can always go in for some of that "local procurement," right?

Right. But with the usual care and caution.

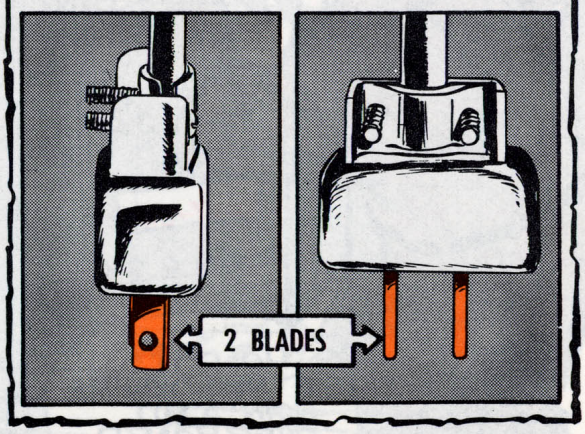
Some of those commercial-type plugs, or connectors, just weren't made to put out in a military manner. You run across such things as light plastic material, even lighter wire, no tensile strength, and all that sort of thing. Doesn't make for good, satisfying connections, what with all those repeated insertions and withdrawals that power plugs are prone to.

Now your military-type (MIL-C-3767) male power plug or connector is designed for real rugged use. It comes with a clamp to grip the cable, so you don't have to rely on the conductors alone for tensile strength. It's well insulated, with rugged prongs that can take on any ol' receptacle without getting bowed in the knees. And as you know, there're some mighty fancy female receptacles stuck around on the walls of some shops, plants, supply points and such.

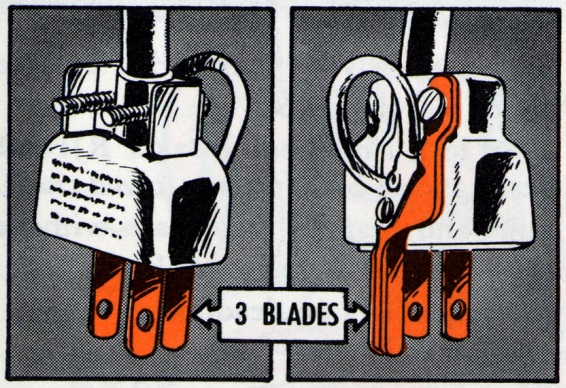
Let's see, now, where were we . . . ?

Federal Supply Catalog C5935-IL-A, Connectors, Electrical (1 Aug 64) lists more connectors than you'll ever know what to do with. But here're some that you can get a lot of use out of:

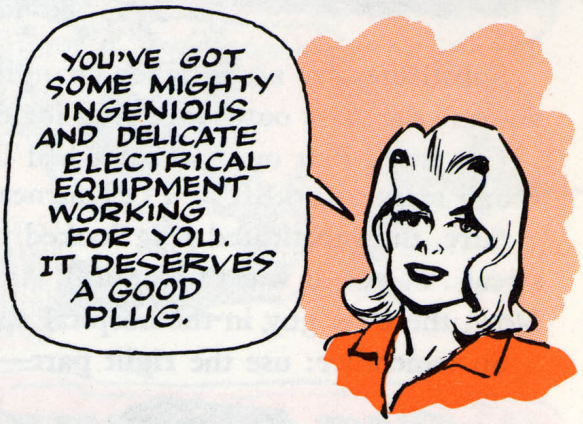
Connector, Plug, Electrical (power, nonpolarized parallel-bladed) Type UP 120M (2 blades), FSN 5935-518-9653.



Connector, Plug, Electrical (power, 3-wire, grounding type) Type UP 121M (3 blades), FSN 5935-636-7145. This has a fixed ground blade and cannot be used in two-blade receptacles.



The whole point is, it's much better to get your AC replacement plugs through the regular supply channels, and to resort to local purchase only as a last resort.



KIT WIPERS

Any swatch of cloth (cheesecloth, handkerchief, piece of sheet) or absorbent cotton can be used instead of the wipers which come with the M5A1, M5A2 or M5A3 protection and treatment kits when the wipers become soiled, lost, etc.

The wiping squares which come with the tubes aren't separate items of issue, but any cloth that's handy, clean and absorbent is OK to use instead for wipin' off the vesicant.

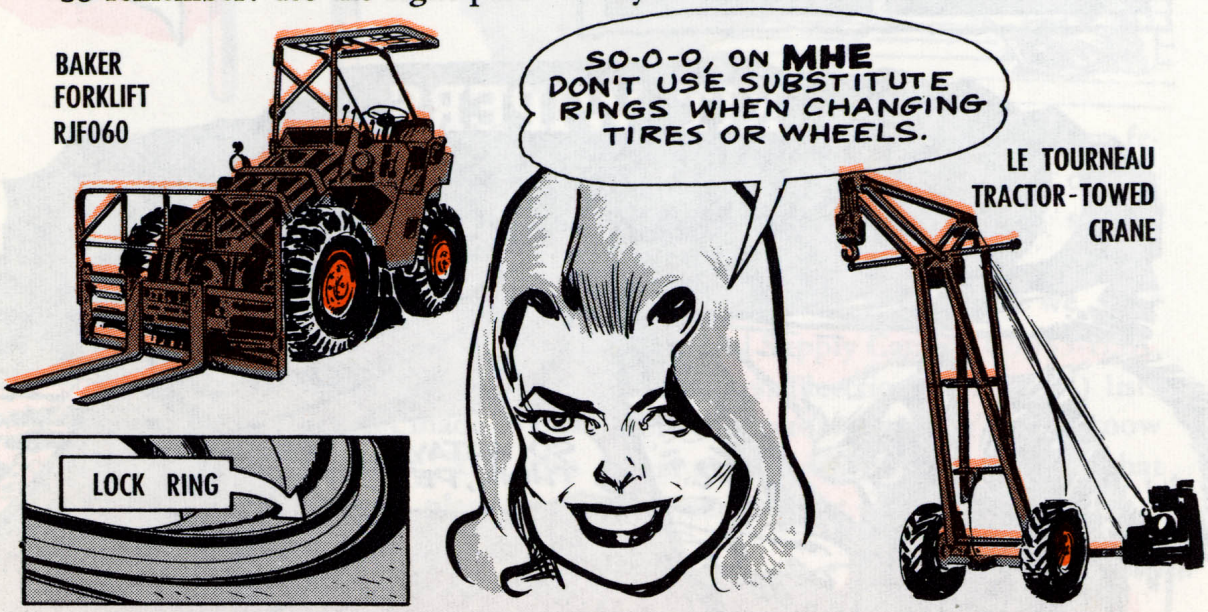
ACCEPT NO SUBSTITUTES

Substitutes are no go when changing tires or wheels on your MHE. Be sure you use the same outer lock ring for the rim or wheel you took off.

Got word that one guy switched the outer lock ring from a Baker RJF060 rough terrain forklift to a LeTourneau-Westinghouse M-20 tractor-towed crane.

Sure, the substituted ring looked the same and snapped into place without sweat . . . but, it wasn't identical. As a result—it gave way under heavy load. Now, there's a guy in the hospital and his equipment's on deadline.

So remember: use the right part—always!

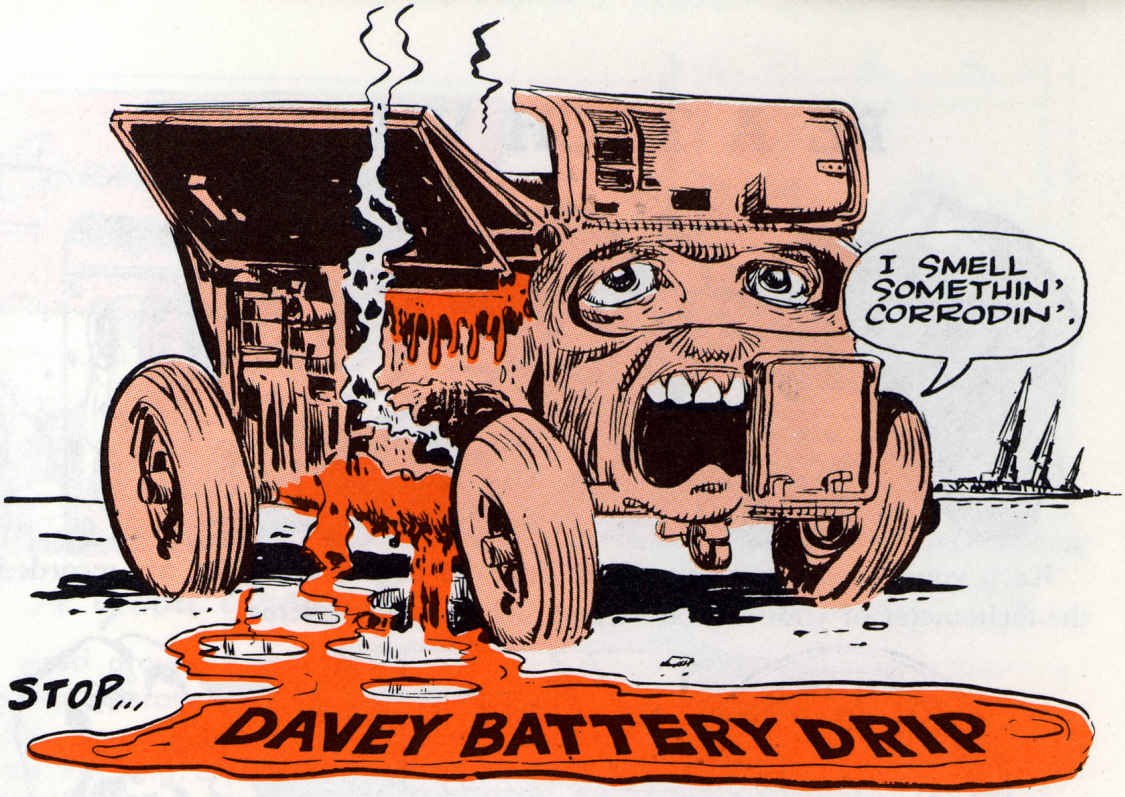


GUARD THE MOUNTING BOLTS

Doing guard duty? Maintenance guard duty, that is, on the main generator mounting bolts of all your electrical power equipment. Loose bolts set up a chain reaction of vibration, mis-alinement and eventual damage to generator rotors or stators. This could knock out your power. Check those mounting bolts now and then for tightness. Get details from the generator TM.

CHANGE THE PLATE

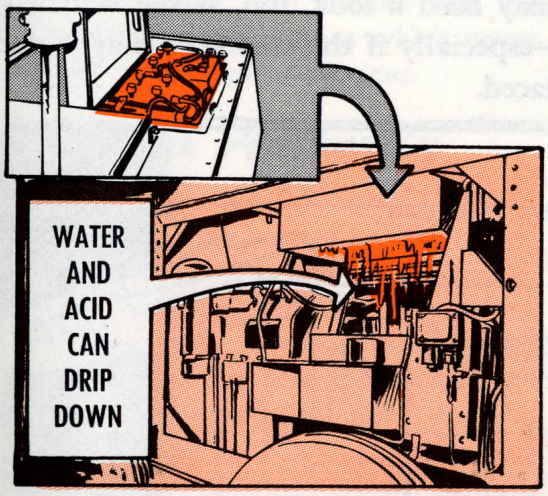
The ID plate on Bogue Electric Company 3-KW generators (FSN 6115-075-1640) procured on P.O.88-AF-50496-N.Y. says the rig is covered by the TM 5-6115-275 series of pubs. The plate is out of date; it should now read TM 5-6115-271 series. Your support people can give you a hand on changing the plate.



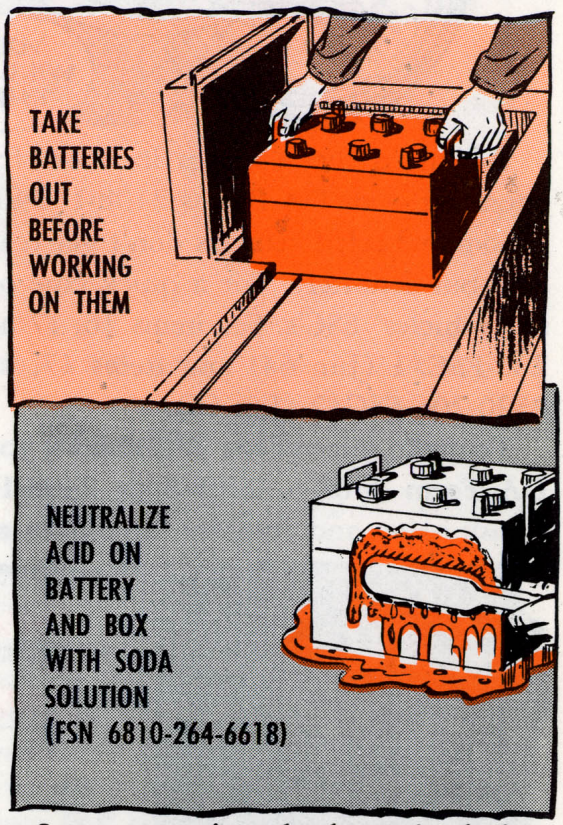
Easy does it . . . when it's battery PM time on your Davey 3, 500 PSI, model P4, air compressor.

There's more to it than just routine maintenance.

Water and acid slopped from the battery through the battery box drain holes can drip and splash on the parts directly below. This potent mixture can enter the first stage air filter . . . or corrode the filter and air shrouds under the box.

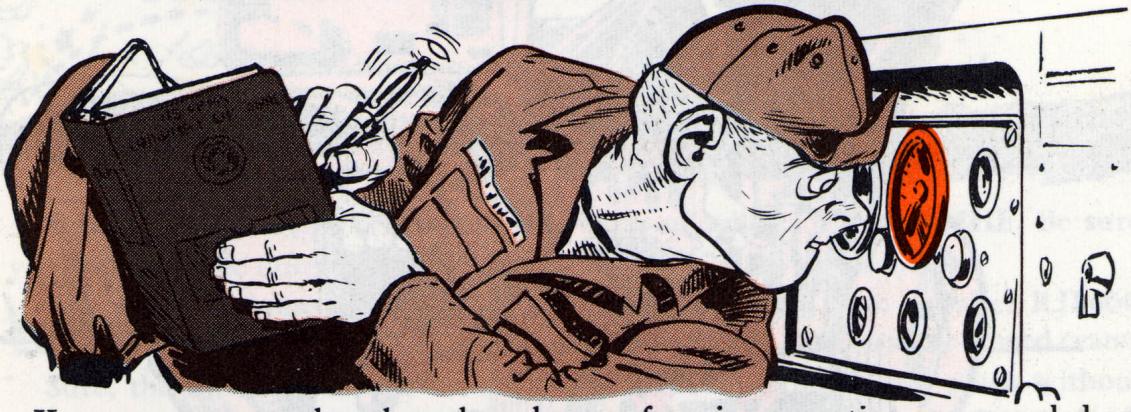


Here's where you come in:

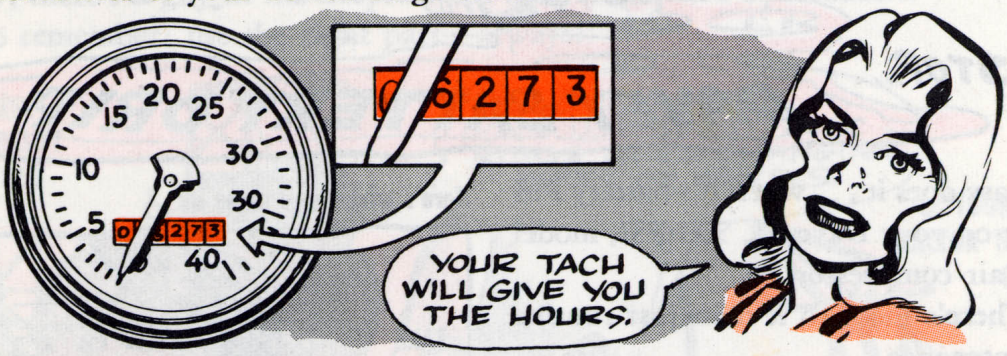


Sure, removing the batteries before pulling PM takes a little more time and muscle, but it'll pay off when your birds are ready to take wing.

BE A TACH WATCHER



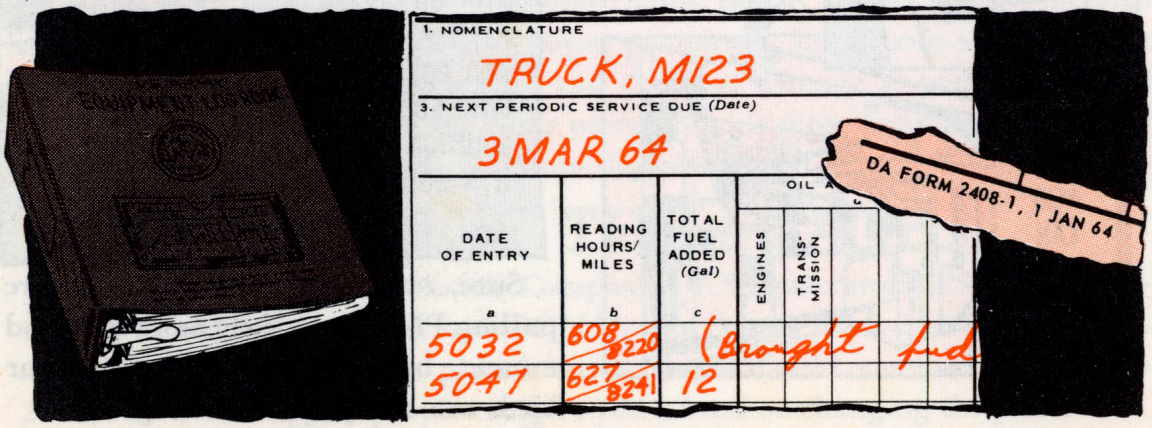
Keep your eye on that slot where hours of engine operation are recorded on the tachometer of your 10-ton cargo truck or truck tractor.

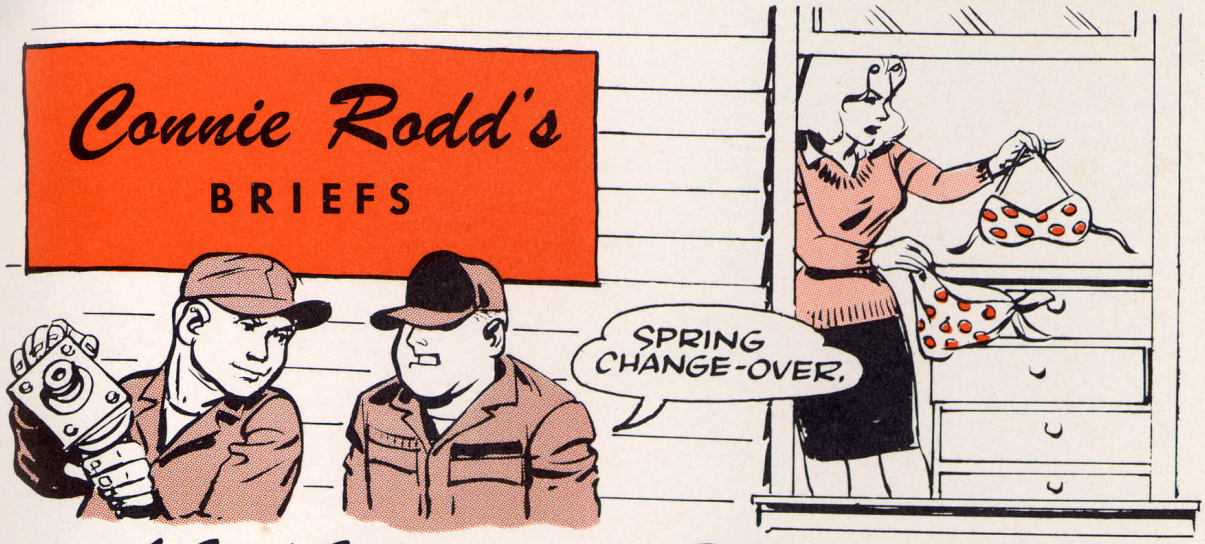


You need the readings in hours from the tach—as well as miles from the odometer—for DA Forms 2408-1, 2408-2, 2408-3 and 2408-10.

Some wheeled vehicles don't get readings in hours, but these 10-ton bruisers do—but definitely. For a quick clue on why you need the hours, take a look at the vehicles' ESC's. See items 16, 17 and 18 for the cargo truck in TM 9-2320-206-ESC/1 (Jun 64) and items 17, 18 and 19 for the truck tractor in TM 9-2320-206-ESC/2 (Jun 64).

To make some of the ESC checks, you may need a look, too, at the vehicle's DA Form 2408-6, 2408-8 or 2408-10—especially if the engine or maybe the transmission and transfer have been replaced.





A Good Ground

A good ground is a must for safe generator operation. To be sure it'll do the job, here's what you need: Rod, ground, 9-ft long, 5/8-in diameter, FSN 5975-642-8937, and Clamp, electrical, FSN 5975-243-5861, and Wire, electrical: No. 6, AWG, 10-ft, FSN 6145-189-6695. Without this ground rod your generator hook-up isn't complete.

Your Dates Out-of-Date?

Are your equipment periodic maintenance services scheduled right on DD Form 314? If not, a quick check in DA Cir 750-3 (12 Jun 64) may help to get 'em back in line. The circular lists the latest publication changes which cover periodic maintenance services.

Your Authority

Lest ye get your DA Form 17 back marked "CI" (item cannot be identified) when you're trying to order more copies of DA Pamphlet 750-38, "Improved Army Equipment Records Procedures" (25 Aug 64) better cite U.S. Army AG Publications Center (Baltimore) Bulletin 42 (26 Oct 64).

Platinum Plug Tip

Be sure you aircraft quys never toss out any old platinum tipped spark plugs or magneto breaker points. You'll turn them in to your support who'll see they get reported to GSA, just like DA Circular 755-5 (18 Dec 64) says.

Headset Replacement

Having trouble tracking down a replacement for the TDH-39 headset used with the AN/TSW-2 battery control central? Relax. The TDH-39's been replaced by the H-144A/U, FSN 5965-682-2769, which is listed on page 3 of TM 9-1430-501-12P/1 (15 Jun 64).

Use the Right Fuse

Now hold on one minute there, Sonny. Don't go slippin' a ringer in on those 1-1/4-amp power pack and jack field fuses of your SB-86/P switchboard. Some Joes have been known to substitute as hot as a 5-amp fuse, and the extra juice those jobs let through might just kinda burn up the switchboard. If you don't have a 1-1/4-amp job, do your best to get one. They're in TM 11-5805-304-20P (Jul 63) under FSN 5920-284-9457 and 5920-284-9454.

Would You Stake Your Life right now on the Condition of Your Equipment?

SPRING . . .

Time For a NEW LEAF
. . . on the tree
. . . on the calendar
. . . on your LO
. . . in your TM
in all of your maintenance . . .

TO KEEP YOUR EQUIPMENT COMBAT READY